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Section II – County Soil and Site Information Reports

**County specific computer generated reports.*

ACREAGE AND PROPORTIONATE EXTENT OF THE SOILS

Buffalo County, Nebraska: Out-of-date

Map symbol	Soil name	Acres	Percent
2Gg	Gibbon Silt Loam, Saline	1,190	0.2
2Hb	Hobbs Silt Loam, Occasionally Flooded	23,462	3.8
2Kt	Kenesaw Fine Sandy Loam, Calcareous Variant, 0 To 1 Percent Slopes	466	*
2Or	Ortello Fine Sandy Loam, Loamy Substratum, 0 To 3 Percent Slopes	3,822	0.6
2OrB2	Ortello Fine Sandy Loam, Loamy Substratum, 3 To 5 Percent Slopes, Eroded	4,100	0.7
2Sc	Scott Silt Loam, Drained	860	0.1
2TXA	Thurman-Valentine Loamy Fine Sands, Loamy Substratum, 0 To 3 Percent Slopes	284	*
AED	Arents, Earthen Dam	13	*
Ax	Alda Fine Sandy Loam	999	0.2
Ay	Alda Loam	3,233	0.5
Bdn	Blendon Fine Sandy Loam, 0 To 1 Percent Slopes	1,001	0.2
BdnA	Blendon Fine Sandy Loam, 1 To 3 Percent Slopes	733	0.1
Bed	Blendon Loam, 0 To 1 Percent Slopes	1,952	0.3
BedA	Blendon Loam, 1 To 3 Percent Slopes	391	*
Bob	Boel Fine Sandy Loam	2,134	0.3
Boc	Boel Loam	851	0.1
By	Breaks-Alluvial Land Complex	8,814	1.4
CbC	Coly Silt Loam, 5 To 11 Percent Slopes	68,635	11.0
CbE	Coly Silt Loam, 11 To 31 Percent Slopes	33,203	5.3
Cm	Cass Loam	443	*
Coz	Cozad Silt Loam, 0 To 1 Percent Slopes	8,222	1.3
CozA	Cozad Silt Loam, 1 To 3 Percent Slopes	1,653	0.3
CozB2	Cozad Silt Loam, 3 To 5 Percent Slopes, Eroded	1,155	0.2
CozC2	Cozad Silt Loam, 5 To 11 Percent Slopes, Eroded	1,522	0.2
Cs	Cass Fine Sandy Loam	584	*
CYE	Coly, Uly, And Hobbs Soils, 15 To 31 Percent Slopes	67,654	10.9
Gg	Gibbon Silt Loam	3,685	0.6
Gk	Grigston Silt Loam	2,097	0.3
GP	Gravel Pit	944	0.2
Ha	Hall Silt Loam, Terrace, 0 To 1 Percent Slopes	14,775	2.4
HaA	Hall Silt Loam, Terrace, 1 To 3 Percent Slopes	1,020	0.2
Hb	Hobbs Silt Loam, 0 To 1 Percent Slopes	8,391	1.3
HbA	Hobbs Silt Loam, 1 To 3 Percent Slopes	12,075	1.9
HbB	Hobbs Silt Loam, 3 To 5 Percent Slopes	1,288	0.2
Hd	Hord Silt Loam, Terrace, 0 To 1 Percent Slopes	49,449	8.0
HdA	Hord Silt Loam, Terrace, 1 To 3 Percent Slopes	2,328	0.4
HoA	Holdrege Silt Loam, 1 To 3 Percent Slopes	26,204	4.2
HoB	Holdrege Silt Loam, 3 To 5 Percent Slopes	1,587	0.3
HoB2	Holdrege Silt Loam, 3 To 5 Percent Slopes, Eroded	9,477	1.5
HQ	Holdrege-Hall Silt Loams, 0 To 1 Percent Slopes	28,937	4.7
In	Inavale Fine Sandy Loam, 0 To 3 Percent Slopes	1,917	0.3
KCB	Kenesaw-Coly Silt Loams, 3 To 5 Percent Slopes	5,026	0.8
Ks	Kenesaw Silt Loam, 0 To 1 Percent Slopes	2,596	0.4
KsA	Kenesaw Silt Loam, 1 To 3 Percent Slopes	8,042	1.3
KsB	Kenesaw Silt Loam, 3 To 5 Percent Slopes	769	0.1
Lex	Lex Silt Loam	2,311	0.4
Lf	Leshara Fine Sandy Loam	324	*
LG	Leshara And Gibbon Silt Loams	8,836	1.4
Lm	Loup Loam	1,737	0.3
Lx	Loamy Alluvial Land	6,782	1.1
M	Marsh	740	0.1
M-W	Miscellaneous Water (sewage Lagoons)	109	*
OrC	Ortello Fine Sandy Loam, 5 To 11 Percent Slopes	663	0.1
P	Platte Soils	11,538	1.9
PL	Platte-Alda Complex	6,416	1.0
RB	Rough Broken Land, Loess	1,092	0.2
Ru	Rusco Silt Loam	665	0.1
Rw	Riverwash	650	0.1
Sc	Scott Silt Loam	501	*
SdA	Simeon Sandy Loam, 0 To 3 Percent Slopes	513	*
Slc	Silver Creek Silt Loam	989	0.2
Sx	Sandy Alluvial Land	1,266	0.2
TsA	Thurman Fine Sandy Loam, Terrace, 0 To 3 Percent Slopes	268	*
TXA	Thurman-Valentine Loamy Fine Sands, 0 To 3 Percent Slopes	665	0.1
TXB	Thurman-Valentine Loamy Fine Sands, 3 To 5 Percent Slopes	3,106	0.5
TYA	Thurman-Valentine Loamy Fine Sands, Terrace, 0 To 3 Percent Slopes	5,917	1.0
UHC	Uly And Holdrege Silt Loams, 5 To 11 Percent Slopes	34,002	5.5
UHC2	Uly, Holdrege, And Coly Soils, 5 To 11 Percent Slopes, Eroded	40,403	6.5
UsD	Uly Silt Loam, 11 To 15 Percent Slopes	12,796	2.1
VbC	Valentine Loamy Fine Sand, 3 To 17 Percent Slopes	21,007	3.4
W	Water	9,547	1.5
Wb	Wann Fine Sandy Loam	1,559	0.3
Wm	Wann Loam	2,513	0.4
Wr	Wood River Silt Loam, 0 To 1 Percent Slopes	23,380	3.8
WrA	Wood River Silt Loam, 1 To 3 Percent Slopes	894	0.1
WS	Wood River-Slickspots Complex, 0 To 1 Percent Slopes	1,428	0.2
Wx	Wet Alluvial Land	1,166	0.2
	Total	621,766	100.0

* Less than 0.1 percent.

NONTECHNICAL SOIL DESCRIPTIONS
Buffalo County, Nebraska

Nontechnical soil descriptions describe soil properties or management considerations specific to a soil map unit or group of map units, shown in the NonTechnical Descriptions report. These descriptions are written in terminology that Non-technical users of soil survey information can understand.
Nontechnical soil descriptions are a powerful tool for creating reports. These high quality, easy to read reports can be generated by conservation planners and other NRCS employees for distribution to land users. Soil map unit descriptions and National Soil Information System records are the basis for these descriptions.

2Gg Gibbon Silt Loam, Saline

Gibbon soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on flood plain on river valley. The runoff class is negligible. The parent material consists of stratified calcareous silty alluvium. This soil is somewhat poorly drained. The slowest permeability is moderately slow. It has a very high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 15 percent calcium carbonate. This soil contains a moderately saline horizon, it has a horizon that is slightly sodic. This soil is in the Saline Subirrigated - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3s. It is in the nonirrigated land capability classification 4s.

2Hb Hobbs Silt Loam, Occasionally Flooded

Hobbs soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood plain on river valley. The runoff class is low. The parent material consists of stratified silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is occasionally flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Silty Overflow - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2w. It is in the nonirrigated land capability classification 2w.

2Kt Kenesaw Fine Sandy Loam, Calcareous Variant, 0 To 1 Percent Slopes

Cozad soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on terrace on river valley. The runoff class is negligible. The parent material consists of coarse-silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 7 percent calcium carbonate. This soil is in the Silty Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2e. It is in the nonirrigated land capability classification 2e.

2Or Ortello Fine Sandy Loam, Loamy Substratum, 0 To 3 Percent Slopes

Anselmo soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping swale on upland, hummock on upland. The runoff class is very low. The parent material consists of loamy eolian deposits. This soil is well drained. The slowest permeability is moderate. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2e. It is in the nonirrigated land capability classification 2e.

2OrB2 Ortello Fine Sandy Loam, Loamy Substratum, 3 To 5 Percent Slopes, Eroded

Anselmo soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping hummock on upland. The runoff class is very low. The parent material consists of loamy eolian deposits. This soil is well drained. The slowest permeability is moderate. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3e. It is in the nonirrigated land capability classification 3e.

2Sc Scott Silt Loam, Drained

Scott soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level depression on playa on upland. The runoff class is negligible. The parent material consists of loess. This soil is poorly drained. The slowest permeability is very slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is occasional ponded. The top of the seasonal high water table is at 6 inches. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Clayey Overflow - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3w. It is in the nonirrigated land capability classification 3w.

2TXA Thurman-Valentine Loamy Fine Sands, Loamy Substratum, 0 To 3 Percent Slopes

Dunday soil makes up 60 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping swale on sandhills. The runoff class is very low. The parent material consists of eolian sands. This soil is somewhat excessively drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3e. It is in the nonirrigated land capability classification 4e.

Valentine soil makes up 40 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping ridge on sandhills, hummock on sandhills. The runoff class is very low. The parent material consists of eolian sands. This soil is excessively drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4e. It is in the nonirrigated land capability classification 4e.

Ax Alda Fine Sandy Loam

Alda soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on flood plain on river valley. The runoff class is negligible. The parent material consists of loamy alluvium over sandy and gravelly alluvium. This soil is somewhat poorly drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 30 inches. The soil contains a maximum amount of 10 percent calcium carbonate. This soil contains a very slightly saline horizon, it has a horizon that is slightly sodic. This soil is in the Subirrigated - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3w. It is in the nonirrigated land capability classification 3w.

Ay Alda Loam

Alda soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on flood plain on river valley. The runoff class is negligible. The parent material consists of loamy alluvium over sandy and gravelly alluvium. This soil is somewhat poorly drained. The slowest permeability is moderate. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 10 percent calcium carbonate. This soil contains a very slightly saline horizon, it has a horizon that is slightly sodic. This soil is in the Subirrigated - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3w. It is in the nonirrigated land capability classification 3w.

Bdn Blendon Fine Sandy Loam, 0 To 1 Percent Slopes

Blendon soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on terrace on river valley. The runoff class is negligible. The parent material consists of sandy eolian deposits. This soil is well drained. The slowest permeability is moderately rapid. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil contains a very slightly saline horizon, it has a horizon that is slightly sodic. This soil is in the Sandy - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2e. It is in the nonirrigated land capability classification 2e.

BdnA Blendon Fine Sandy Loam, 1 To 3 Percent Slopes

Anselmo soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a gently sloping terrace on river valley. The runoff class is very low. The parent material consists of loamy eolian deposits and/or sandy eolian deposits. This soil is well drained. The slowest permeability is moderate. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 3 percent calcium carbonate. This soil is in the Sandy - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2e. It is in the nonirrigated land capability classification 2e.

Bed Blendon Loam, 0 To 1 Percent Slopes

Blendon soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on terrace on river valley. The runoff class is negligible. The parent material consists of sandy eolian deposits. This soil is well drained. The slowest permeability is moderate. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil contains a very slightly saline horizon, it has a horizon that is slightly sodic. This soil is in the Sandy - Veg. Zone 3 range site. This soil is in the irrigated land capability class 1 It is in the nonirrigated land capability classification 2c.

BedA Blendon Loam, 1 To 3 Percent Slopes

Anselmo soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a gently sloping terrace on river valley. The runoff class is very low. The parent material consists of loamy eolian deposits and/or sandy eolian deposits. This soil is well drained. The slowest permeability is moderate. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 3 percent calcium carbonate. This soil is in the Sandy - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2e. It is in the nonirrigated land capability classification 2e.

Bob Boel Fine Sandy Loam

Boel soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flat on flood plain on river valley. The runoff class is negligible. The parent material consists of sandy alluvium. This soil is somewhat poorly drained. The slowest permeability is moderately rapid. It has a moderate available water capacity and a low shrink swell potential. This soil is occasionally flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Subirrigated - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3w. It is in the nonirrigated land capability classification 3w.

Boc Boel Loam

Boel soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flat on flood plain on river valley. The runoff class is negligible. The parent material consists of sandy alluvium. This soil is somewhat poorly drained. The slowest permeability is moderate. It has a moderate available water capacity and a low shrink swell potential. This soil is occasionally flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Subirrigated - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3w. It is in the nonirrigated land capability classification 3w.

By Breaks-Alluvial Land Complex

Coly soil makes up 50 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping to steep scarp on terrace on river valley. The runoff class is high. The parent material consists of fine-silty calcareous loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Limy Upland - Veg. Zone 3 range site. It is in the nonirrigated land capability classification 6e.

Hobbs soil makes up 50 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level to moderately sloping flood plain on river valley. The runoff class is low. The parent material consists of stratified silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is frequently flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty Overflow - Veg. Zone 3 range site. It is in the nonirrigated land capability classification 6w.

CbC Coly Silt Loam, 5 To 11 Percent Slopes

Coly soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is medium. The parent material consists of fine-silty calcareous loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Limy Upland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4e. It is in the nonirrigated land capability classification 4e.

CbE Coly Silt Loam, 11 To 31 Percent Slopes

Coly soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a strongly sloping to steep break on upland, hillslope on upland. The runoff class is high. The parent material consists of fine-silty calcareous loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Limy Upland - Veg. Zone 3 range site. It is in the nonirrigated land capability classification 6e.

Cm Cass Loam

Cass soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on flood plain on river valley. The runoff class is negligible. The parent material consists of sandy alluvium. This soil is well drained. The slowest permeability is moderate. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 1 It is in the nonirrigated land capability classification 1.

Coz Cozad Silt Loam, 0 To 1 Percent Slopes

Cozad soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on terrace on river valley. The runoff class is negligible. The parent material consists of coarse-silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Silty Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 1 It is in the nonirrigated land capability classification 2c.

CozA Cozad Silt Loam, 1 To 3 Percent Slopes

Cozad soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a gently sloping terrace on river valley. The runoff class is low. The parent material consists of coarse-silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Silty Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2e. It is in the nonirrigated land capability classification 2e.

CozB2 Cozad Silt Loam, 3 To 5 Percent Slopes, Eroded

Cozad soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping terrace on river valley. The runoff class is low. The parent material consists of coarse-silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Silty Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3e. It is in the nonirrigated land capability classification 3e.

CozC2 Cozad Silt Loam, 5 To 11 Percent Slopes, Eroded

Cozad soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping scarp on terrace on river valley. The runoff class is medium. The parent material consists of coarse-silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Silty Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4e. It is in the nonirrigated land capability classification 4e.

Cs Cass Fine Sandy Loam

Cass soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flat on flood plain on river valley. The runoff class is negligible. The parent material consists of sandy alluvium. This soil is well drained. The slowest permeability is moderately rapid. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2e. It is in the nonirrigated land capability classification 2e.

CYE Coly, Uly, And Hobbs Soils, 15 To 31 Percent Slopes

Coly soil makes up 60 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately steep to steep hillslope on upland, break on upland. The runoff class is high. The parent material consists of fine-silty calcareous loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Limy Upland - Veg. Zone 3 range site. It is in the nonirrigated land capability classification 6e.

Gg Gibbon Silt Loam

Gibbon soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on flood plain on river valley. The runoff class is negligible. The parent material consists of stratified calcareous silty alluvium. This soil is somewhat poorly drained. The slowest permeability is moderate. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 15 percent calcium carbonate. it has a horizon that is slightly sodic. This soil is in the Subirrigated - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2w. It is in the nonirrigated land capability classification 2w.

Gk Grigston Silt Loam

Grigston soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on flood plain on river valley. The runoff class is negligible. The parent material consists of calcareous alluvium. This soil is well drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Silty Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 1 It is in the nonirrigated land capability classification 1.

Ha Hall Silt Loam, Terrace, 0 To 1 Percent Slopes

Hall soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on interfluve on upland. The runoff class is low. The parent material consists of loess. This soil is well drained. The slowest permeability is moderately slow. It has a very high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 1 It is in the nonirrigated land capability classification 2c.

HaA Hall Silt Loam, Terrace, 1 To 3 Percent Slopes

Hall soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a gently sloping interfluve on upland. The runoff class is low. The parent material consists of loess. This soil is well drained. The slowest permeability is moderately slow. It has a very high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2e. It is in the nonirrigated land capability classification 2e.

Hb Hobbs Silt Loam, 0 To 1 Percent Slopes

Hord soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on terrace on river valley. The runoff class is negligible. The parent material consists of colluvium and/or loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 1 It is in the nonirrigated land capability classification 2c.

HbA Hobbs Silt Loam, 1 To 3 Percent Slopes

Hord soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a gently sloping terrace on river valley. The runoff class is low. The parent material consists of colluvium and/or loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2e. It is in the nonirrigated land capability classification 2e.

HbB Hobbs Silt Loam, 3 To 5 Percent Slopes

Hord soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping terrace on river valley. The runoff class is low. The parent material consists of colluvium and/or loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3e. It is in the nonirrigated land capability classification 3e.

Hd Hord Silt Loam, Terrace, 0 To 1 Percent Slopes

Hord soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on terrace on river valley. The runoff class is negligible. The parent material consists of colluvium and/or loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 1 It is in the nonirrigated land capability classification 2c.

HdA Hord Silt Loam, Terrace, 1 To 3 Percent Slopes

Hord soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a gently sloping terrace on river valley. The runoff class is low. The parent material consists of colluvium and/or loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2e. It is in the nonirrigated land capability classification 2e.

HoA Holdrege Silt Loam, 1 To 3 Percent Slopes

Holdrege soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a gently sloping flat on interfluve on upland. The runoff class is low. The parent material consists of loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2e. It is in the nonirrigated land capability classification 2e.

HoB Holdrege Silt Loam, 3 To 5 Percent Slopes

Holdrege soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping interfluve on upland. The runoff class is low. The parent material consists of loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3e. It is in the nonirrigated land capability classification 3e.

HoB2 Holdrege Silt Loam, 3 To 5 Percent Slopes, Eroded

Holdrege soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping interfluve on upland. The runoff class is low. The parent material consists of loess. This soil is well drained. The slowest permeability is moderate. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Silty - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3e. It is in the nonirrigated land capability classification 3e.

HQ Holdrege-Hall Silt Loams, 0 To 1 Percent Slopes

Holdrege soil makes up 60 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on interfluve on upland. The runoff class is low. The parent material consists of loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty - Veg. Zone 3 range site. This soil is in the irrigated land capability class 1 It is in the nonirrigated land capability classification 2c.

Hall soil makes up 40 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on interfluve on upland. <runoff is missing> The parent material consists of loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty - Veg. Zone 3 range site. This soil is in the irrigated land capability class 1 It is in the nonirrigated land capability classification 2c.

In Inavale Fine Sandy Loam, 0 To 3 Percent Slopes

Inavale soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flat on flood plain on river valley. The runoff class is negligible. The parent material consists of sandy alluvium. This soil is excessively drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 60 inches. This soil is in the Sandy Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3e. It is in the nonirrigated land capability classification 3e.

KCB Kenesaw-Coly Silt Loams, 3 To 5 Percent Slopes

Kenesaw soil makes up 60 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping hummock on upland, flat on upland. The runoff class is low. The parent material consists of calcareous loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3e. It is in the nonirrigated land capability classification 3e.

Coly soil makes up 40 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping hillslope on upland. The runoff class is low. The parent material consists of fine-silty calcareous loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Limy Upland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3e. It is in the nonirrigated land capability classification 3e.

Ks Kenesaw Silt Loam, 0 To 1 Percent Slopes

Kenesaw soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level hummock on upland. The runoff class is negligible. The parent material consists of calcareous loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty - Veg. Zone 3 range site. This soil is in the irrigated land capability class 1 It is in the nonirrigated land capability classification 2c.

KsA Kenesaw Silt Loam, 1 To 3 Percent Slopes

Kenesaw soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a gently sloping hummock on upland. The runoff class is low. The parent material consists of calcareous loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2e. It is in the nonirrigated land capability classification 2e.

KsB Kenesaw Silt Loam, 3 To 5 Percent Slopes

Kenesaw soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping hummock on upland. The runoff class is low. The parent material consists of calcareous loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3e. It is in the nonirrigated land capability classification 3e.

Lex Lex Silt Loam

Lex soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on flood plain on river valley. The runoff class is low. The parent material consists of loamy alluvium over sandy and gravelly alluvium. This soil is somewhat poorly drained. The slowest permeability is moderately slow. It has a low available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 10 percent calcium carbonate. This soil contains a very slightly saline horizon, it has a horizon that is slightly sodic. This soil is in the Subirrigated - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3w. It is in the nonirrigated land capability classification 3w.

Lf Leshara Fine Sandy Loam

Leshara soil makes up 100 percent of the map unit. This map unit is in the Rolling Plains and Breaks Major Land Resource Area. This soil occurs on a nearly level flat on flood plain on river valley. The runoff class is negligible. The parent material consists of stratified loamy alluvium. This soil is somewhat poorly drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Subirrigated - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2w. It is in the nonirrigated land capability classification 2w.

LG Leshara And Gibbon Silt Loams

Leshara soil makes up 50 percent of the map unit. This map unit is in the Rolling Plains and Breaks Major Land Resource Area. This soil occurs on a nearly level flat on flood plain on river valley. The runoff class is negligible. The parent material consists of stratified loamy alluvium. This soil is somewhat poorly drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Subirrigated - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2w. It is in the nonirrigated land capability classification 2w.

Gibbon soil makes up 50 percent of the map unit. This map unit is in the Rolling Plains and Breaks Major Land Resource Area. This soil occurs on a nearly level flat on flood plain on river valley. The runoff class is negligible. The parent material consists of stratified calcareous silty alluvium. This soil is somewhat poorly drained. The slowest permeability is moderate. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 10 percent calcium carbonate. it has a horizon that is slightly sodic. This soil is in the Subirrigated - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2w. It is in the nonirrigated land capability classification 2w.

Lm Loup Loam

Loup soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on flood plain on river valley. The runoff class is negligible. The parent material consists of sandy alluvium. This soil is very poorly drained. The slowest permeability is moderate. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 0 inches. The soil contains a maximum amount of 7 percent calcium carbonate. This soil is in the Wet Land - Veg. Zone 3 range site. It is in the nonirrigated land capability classification 5w.

Lx Loamy Alluvial Land

Gothenburg soil makes up 100 percent of the map unit. This map unit is in the Rolling Plains and Breaks Major Land Resource Area. This soil occurs on a nearly level to gently sloping flat on flood plain on river valley. The runoff class is negligible. The parent material consists of sandy and gravelly alluvium. This soil is poorly drained. The slowest permeability is moderate. It has a low available water capacity and a low shrink swell potential. This soil is frequently flooded and is not ponded. The top of the seasonal high water table is at 0 inches. The soil contains a maximum amount of 5 percent calcium carbonate. It is in the nonirrigated land capability classification 7s.

M Marsh

Fluvaquents soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level depression on flood plain on river valley. The runoff class is negligible. The parent material consists of silty alluvium. This soil is very poorly drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is occasionally flooded and is not ponded. The top of the seasonal high water table is at 0 inches. It is in the nonirrigated land capability classification 8w.

OrC Ortello Fine Sandy Loam, 5 To 11 Percent Slopes

Anselmo soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is low. The parent material consists of loamy eolian deposits. This soil is well drained. The slowest permeability is moderate. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4e. It is in the nonirrigated land capability classification 4e.

P Platte Soils

Platte soil makes up 100 percent of the map unit. This map unit is in the Rolling Plains and Breaks Major Land Resource Area. This soil occurs on a nearly level to gently sloping flat on flood plain on river valley. The runoff class is very low. The parent material consists of loamy alluvium over sandy and gravelly alluvium. This soil is somewhat poorly drained. The slowest permeability is moderate. It has a low available water capacity and a low shrink swell potential. This soil is occasionally flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Subirrigated - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4w. It is in the nonirrigated land capability classification 6w.

PL Platte-Alda Complex

Platte soil makes up 60 percent of the map unit. This map unit is in the Rolling Plains and Breaks Major Land Resource Area. This soil occurs on a nearly level to gently sloping flat on flood plain on river valley. The runoff class is very low. The parent material consists of loamy alluvium over sandy and gravelly alluvium. This soil is somewhat poorly drained. The slowest permeability is moderate. It has a low available water capacity and a low shrink swell potential. This soil is occasionally flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Subirrigated - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4w. It is in the nonirrigated land capability classification 6w.

Alda soil makes up 40 percent of the map unit. This map unit is in the Rolling Plains and Breaks Major Land Resource Area. This soil occurs on a nearly level to gently sloping flat on flood plain on river valley. The runoff class is very low. The parent material consists of loamy alluvium over sandy and gravelly alluvium. This soil is somewhat poorly drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 30 inches. The soil contains a maximum amount of 15 percent calcium carbonate. This soil contains a very slightly saline horizon, it has a horizon that is slightly sodic. This soil is in the Subirrigated - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3w. It is in the nonirrigated land capability classification 3w.

RB Rough Broken Land, Loess

Coly soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a steep to very steep hillslope on upland, break on upland. The runoff class is high. The parent material consists of fine-silty calcareous loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Thin Loess - Veg. Zone 3 range site. It is in the nonirrigated land capability classification 7e.

Ru Rusco Silt Loam

Rusco soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level depression on upland. The runoff class is negligible. The parent material consists of loamy eolian deposits over silty alluvium. This soil is moderately well drained. The slowest permeability is moderately slow. It has a very high available water capacity and a moderate shrink swell potential. This soil is not flooded and is rare ponded. The top of the seasonal high water table is at 6 inches. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Silty Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 1 It is in the nonirrigated land capability classification 2c.

Sc Scott Silt Loam

Scott soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level depression on playa on upland. The runoff class is negligible. The parent material consists of loess. This soil is poorly drained. The slowest permeability is very slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is frequent ponded. The top of the seasonal high water table is at 6 inches. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the No Site - Veg. Zone 3 range site. It is in the nonirrigated land capability classification 4w.

SdA Simeon Sandy Loam, 0 To 3 Percent Slopes

Simeon soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flat on terrace on river valley. The runoff class is negligible. The parent material consists of sandy and gravelly alluvium. This soil is excessively drained. The slowest permeability is moderately rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Shallow To Gravel - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4s. It is in the nonirrigated land capability classification 6s.

Slc Silver Creek Silt Loam

Silver Creek soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on flood plain on river valley. The runoff class is medium. The parent material consists of alluvium. This soil is somewhat poorly drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 36 inches. The soil contains a maximum amount of 15 percent calcium carbonate. This soil contains a slightly saline horizon, it has a horizon that is slightly sodic. This soil is in the Subirrigated - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3w. It is in the nonirrigated land capability classification 3w.

Sx Sandy Alluvial Land

Bolent soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on flood plain on river valley. The runoff class is negligible. The parent material consists of sandy alluvium. This soil is somewhat poorly drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is occasionally flooded and is not ponded. The top of the seasonal high water table is at 36 inches. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Subirrigated - Veg. Zone 3 range site. It is in the nonirrigated land capability classification 6w.

TsA Thurman Fine Sandy Loam, Terrace, 0 To 3 Percent Slopes

Dunday soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping sand sheet on terrace on sandhills. The runoff class is very low. The parent material consists of eolian sands. This soil is somewhat excessively drained. The slowest permeability is moderately rapid. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3e. It is in the nonirrigated land capability classification 4e.

TXA Thurman-Valentine Loamy Fine Sands, 0 To 3 Percent Slopes

Dunday soil makes up 60 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping swale on sandhills. The runoff class is very low. The parent material consists of eolian sands. This soil is somewhat excessively drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3e. It is in the nonirrigated land capability classification 4e.

Valentine soil makes up 40 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping hummock on sandhills, ridge on sandhills. The runoff class is very low. The parent material consists of eolian sands. This soil is excessively drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4e. It is in the nonirrigated land capability classification 4e.

TXB Thurman-Valentine Loamy Fine Sands, 3 To 5 Percent Slopes

Dunday soil makes up 60 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping swale on sandhills. The runoff class is very low. The parent material consists of eolian sands. This soil is somewhat excessively drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4e. It is in the nonirrigated land capability classification 4e.

Valentine soil makes up 40 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping ridge on sandhills, hummock on sandhills. The runoff class is very low. The parent material consists of eolian sands. This soil is excessively drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sands - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4e. It is in the nonirrigated land capability classification 6e.

TYA Thurman-Valentine Loamy Fine Sands, Terrace, 0 To 3 Percent Slopes

Dunday soil makes up 60 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping swale on terrace on river valley. The runoff class is very low. The parent material consists of eolian sands. This soil is somewhat excessively drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3e. It is in the nonirrigated land capability classification 4e.

Valentine soil makes up 40 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping ridge on terrace on river valley, hummock on terrace on river valley. The runoff class is very low. The parent material consists of eolian sands. This soil is excessively drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4e. It is in the nonirrigated land capability classification 4e.

UHC Uly And Holdrege Silt Loams, 5 To 11 Percent Slopes

Uly soil makes up 50 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is medium. The parent material consists of fine-silty calcareous loess. This soil is well drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 15 percent calcium carbonate. This soil is in the Silty - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4e. It is in the nonirrigated land capability classification 4e.

Holdrege soil makes up 50 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is high. The parent material consists of loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4e. It is in the nonirrigated land capability classification 4e.

UHC2 Uly, Holdrege, And Coly Soils, 5 To 11 Percent Slopes, Eroded

Uly soil makes up 40 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is medium. The parent material consists of fine-silty calcareous loess. This soil is well drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 15 percent calcium carbonate. This soil is in the Silty - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4e. It is in the nonirrigated land capability classification 4e.

Holdrege soil makes up 30 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is high. The parent material consists of loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Silty - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4e. It is in the nonirrigated land capability classification 4e.

Coly soil makes up 30 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is medium. The parent material consists of fine-silty calcareous loess. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Limy Upland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4e. It is in the nonirrigated land capability classification 4e.

UsD Uly Silt Loam, 11 To 15 Percent Slopes

Uly soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a strongly sloping to moderately steep hillslope on upland. The runoff class is medium. The parent material consists of fine-silty calcareous loess. This soil is well drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 15 percent calcium carbonate. This soil is in the Silty - Veg. Zone 3 range site. It is in the nonirrigated land capability classification 6e.

VbC Valentine Loamy Fine Sand, 3 To 17 Percent Slopes

Valentine soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a moderately sloping to moderately steep dune on sandhills. The runoff class is very low. The parent material consists of eolian sands. This soil is excessively drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sands - Veg. Zone 3 range site. It is in the nonirrigated land capability classification 6e.

NONTECHNICAL SOIL DESCRIPTIONS--Continued
Buffalo County, Nebraska

Wb Wann Fine Sandy Loam

Wann soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on flood plain on river valley. The runoff class is negligible. The parent material consists of calcareous loamy alluvium. This soil is somewhat poorly drained. The slowest permeability is moderately rapid. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 36 inches. The soil contains a maximum amount of 5 percent calcium carbonate. it has a horizon that is slightly sodic. This soil is in the Subirrigated - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2w. It is in the nonirrigated land capability classification 2w.

Wm Wann Loam

Wann soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on flood plain on river valley. The runoff class is negligible. The parent material consists of calcareous loamy alluvium. This soil is somewhat poorly drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 36 inches. The soil contains a maximum amount of 5 percent calcium carbonate. it has a horizon that is slightly sodic. This soil is in the Subirrigated - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2w. It is in the nonirrigated land capability classification 2w.

Wr Wood River Silt Loam, 0 To 1 Percent Slopes

Wood River soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on terrace on river valley. The runoff class is high. The parent material consists of silty alluvium. This soil is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 15 percent calcium carbonate. This soil contains a slightly saline horizon, it has a horizon that is moderately sodic. This soil is in the Clayey - Veg. Zone 3 range site. This soil is in the irrigated land capability class 2s. It is in the nonirrigated land capability classification 2s.

WrA Wood River Silt Loam, 1 To 3 Percent Slopes

Wood River soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a gently sloping terrace on river valley. The runoff class is high. The parent material consists of silty alluvium. This soil is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 15 percent calcium carbonate. This soil contains a slightly saline horizon, it has a horizon that is moderately sodic. This soil is in the Clayey - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3e. It is in the nonirrigated land capability classification 2e.

WS Wood River-Slickspots Complex, 0 To 1 Percent Slopes

Wood River soil makes up 70 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on terrace on river valley. The runoff class is high. The parent material consists of silty alluvium. This soil is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 15 percent calcium carbonate. This soil contains a slightly saline horizon, it has a horizon that is strongly sodic. This soil is in the Saline Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 3s. It is in the nonirrigated land capability classification 4s.

Gayville Variant soil makes up 30 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on terrace on river valley. The runoff class is high. The parent material consists of clayey alluvium over loamy alluvium. This soil is somewhat poorly drained. The slowest permeability is slow. It has a very high available water capacity and a moderate shrink swell potential. This soil is rarely flooded and is not ponded. The top of the seasonal high water table is at 36 inches. The soil contains a maximum amount of 10 percent calcium carbonate. This soil contains a slightly saline horizon, it has a horizon that is moderately sodic. This soil is in the Saline Lowland - Veg. Zone 3 range site. This soil is in the irrigated land capability class 4s. It is in the nonirrigated land capability classification 4s.

Wx Wet Alluvial Land

Barney soil makes up 100 percent of the map unit. This map unit is in the Central Nebraska Loess Hills Major Land Resource Area. This soil occurs on a nearly level flat on flood plain on river valley. The runoff class is negligible. The parent material consists of loamy alluvium over sandy and gravelly alluvium. This soil is very poorly drained. The slowest permeability is moderately slow. It has a low available water capacity and a low shrink swell potential. This soil is frequently flooded and is not ponded. The top of the seasonal high water table is at 0 inches. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Wet Land - Veg. Zone 3 range site. It is in the nonirrigated land capability classification 5w.

2Gg—Gibbon silt loam, Saline

Map Unit Composition

Gibbon: 100 percent

Component Descriptions
Gibbon
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Stratified calcareous silty alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.9 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 24 to 60 inches
Runoff class: Negligible
Ecological site: Saline Subirrigated - Veg. Zone 3
Land capability (irrigated): 3s
Land capability (nonirrigated): 4s

Typical Profile:
H1—0 to 9 inches; silt loam
H2—9 to 40 inches; silt loam
H3—40 to 80 inches; silty clay loam

2Hb—Hobbs silt loam, Occasionally Flooded

Map Unit Composition

Hobbs: 100 percent

Component Descriptions
Hobbs
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flood plain on river valley
Parent material: Stratified silty alluvium
Slope: 0 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.3 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Silty Overflow - Veg. Zone 3
Land capability (irrigated): 2w
Land capability (nonirrigated): 2w

Typical Profile:
H1—0 to 28 inches; silt loam
H2—28 to 60 inches; stratified silt loam

Minor Components
Wt At 0-1 Foot

2Kt—Kenesaw fine sandy loam, Calcareous Variant, 0 to 1 percent slopes

Map Unit Composition

Cozad: 100 percent

Component Descriptions
Cozad
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on terrace on river valley
Parent material: Coarse-silty alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.5 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Silty Lowland - Veg. Zone 3
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 12 inches; fine sandy loam
H2—12 to 58 inches; loam
H1—58 to 60 inches; fine sandy loam

2Or—Ortello fine sandy loam, loamy Substratum, 0 to 3 percent slopes

Map Unit Composition

Anselmo: 100 percent

Component Descriptions
Anselmo
MLRA: 71 - Central Nebraska Loess Hills
Landform: Swale on upland, hummock on upland
Parent material: Loamy eolian deposits
Slope: 0 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 8.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy - Veg. Zone 3
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 17 inches; fine sandy loam
H2—17 to 46 inches; loamy fine sand
H3—46 to 53 inches; fine sandy loam
H4—53 to 60 inches; silt loam

2OrB2—Ortello fine sandy loam, loamy Substratum, 3 to 5 percent slopes, Eroded

Map Unit Composition

Anselmo: 100 percent

Component Descriptions
Anselmo
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hummock on upland
Parent material: Loamy eolian deposits
Slope: 3 to 5 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 8.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy - Veg. Zone 3
Land capability (irrigated): 3e
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 17 inches; fine sandy loam
H2—17 to 46 inches; loamy fine sand
H3—46 to 53 inches; fine sandy loam
H4—53 to 60 inches; silt loam

2Sc—Scott silt loam, Drained

Map Unit Composition

Scott: 100 percent

Component Descriptions
Scott
MLRA: 71 - Central Nebraska Loess Hills
Landform: Depression on playa on upland
Parent material: Loess
Slope: 0 to 1 percent
Drainage class: Poorly drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: High (About 9.2 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Ponding hazard: Occasional
Depth to seasonal water saturation: About 0 to 12 inches
Runoff class: Negligible
Ecological site: Clayey Overflow - Veg. Zone 3
Land capability (irrigated): 3w
Land capability (nonirrigated): 3w

Typical Profile:
H1—0 to 9 inches; silt loam
H2—9 to 42 inches; silty clay
H3—42 to 52 inches; silty clay loam
H4—52 to 60 inches; silt loam

2TXA—Thurman-Valentine loamy fine sands, loamy Substratum, 0 to 3 percent slopes

Map Unit Composition

Dunday: 60 percent
Valentine: 40 percent

Component Descriptions
Dunday
MLRA: 71 - Central Nebraska Loess Hills
Landform: Swale on sandhills
Parent material: Eolian sands
Slope: 0 to 3 percent
Drainage class: Somewhat excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 5.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy - Veg. Zone 3
Land capability (irrigated): 3e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 11 inches; loamy fine sand
H2—11 to 60 inches; fine sand

Valentine
MLRA: 71 - Central Nebraska Loess Hills
Landform: Ridge on sandhills, hummock on sandhills
Parent material: Eolian sands
Slope: 0 to 3 percent
Drainage class: Excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 4.8 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy - Veg. Zone 3
Land capability (irrigated): 4e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 5 inches; loamy fine sand
H2—5 to 30 inches; loamy sand
H3—30 to 60 inches; fine sand

AED—Arents, Earthen Dam

Map Unit Composition

Arents, Earthen Dam: 100 percent

Component Descriptions
Arents, Earthen Dam
MLRA: 71 - Central Nebraska Loess Hills,73 - Rolling Plains and Breaks
Depth to seasonal water saturation: More than 6 feet
Land capability (nonirrigated): 8

Ax—Alda fine sandy loam

Map Unit Composition

Alda: 100 percent

Component Descriptions
Alda
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Loamy alluvium over sandy and gravelly alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Low (About 5.2 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 30 to 72 inches
Runoff class: Negligible
Ecological site: Subirrigated - Veg. Zone 3
Land capability (irrigated): 3w
Land capability (nonirrigated): 3w

Typical Profile:
H1—0 to 8 inches; fine sandy loam
H2—8 to 26 inches; fine sandy loam
H3—26 to 80 inches; stratified gravelly sand

Minor Components
Wt At 0-1 Foot

Ay—Alda loam

Map Unit Composition

Alda: 100 percent

Component Descriptions
Alda
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Loamy alluvium over sandy and gravelly alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 5.5 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 24 to 72 inches
Runoff class: Negligible
Ecological site: Subirrigated - Veg. Zone 3
Land capability (irrigated): 3w
Land capability (nonirrigated): 3w

Typical Profile:
H1—0 to 8 inches; loam
H2—8 to 26 inches; fine sandy loam
H3—26 to 80 inches; stratified gravelly sand

Minor Components
Wt At 0-1 Foot

Bdn—Blendon fine sandy loam, 0 to 1 percent slopes

Map Unit Composition

Blendon: 100 percent

Component Descriptions
Blendon
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on terrace on river valley
Parent material: Sandy eolian deposits
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 1.98 in/hr)
Available water capacity: Moderate (About 6.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Sandy - Veg. Zone 3
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 26 inches; fine sandy loam
H2—26 to 36 inches; fine sandy loam
H3—36 to 42 inches; loamy fine sand
H4—42 to 80 inches; gravelly sand

BdnA—Blendon fine sandy loam, 1 to 3 percent slopes

Map Unit Composition

Anselmo: 100 percent

Component Descriptions
Anselmo
MLRA: 71 - Central Nebraska Loess Hills
Landform: Terrace on river valley
Parent material: Loamy eolian deposits and/or sandy eolian deposits
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.57 in/hr)
Available water capacity: Moderate (About 7.5 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy - Veg. Zone 3
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 14 inches; fine sandy loam
H2—14 to 26 inches; fine sandy loam
H3—26 to 36 inches; fine sandy loam
H4—36 to 80 inches; loamy fine sand

Bed—Blendon loam, 0 to 1 percent slopes

Map Unit Composition

Blendon: 100 percent

Component Descriptions
Blendon
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on terrace on river valley
Parent material: Sandy eolian deposits
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.57 in/hr)
Available water capacity: Moderate (About 6.3 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Sandy - Veg. Zone 3
Land capability (irrigated): 1
Land capability (nonirrigated): 2c

Typical Profile:
H1—0 to 17 inches; loam
H2—17 to 26 inches; fine sandy loam
H3—26 to 36 inches; fine sandy loam
H4—42 to 80 inches; stratified gravelly sand

BedA—Blendon loam, 1 to 3 percent slopes

Map Unit Composition

Anselmo: 100 percent

Component Descriptions
Anselmo
MLRA: 71 - Central Nebraska Loess Hills
Landform: Terrace on river valley
Parent material: Loamy eolian deposits and/or sandy eolian deposits
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.57 in/hr)
Available water capacity: Moderate (About 8.2 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy - Veg. Zone 3
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 14 inches; loam
H2—14 to 26 inches; fine sandy loam
H3—26 to 36 inches; fine sandy loam
H4—36 to 80 inches; fine sand

Bob—Boel fine sandy loam

Map Unit Composition

Boel: 100 percent

Component Descriptions
Boel
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Sandy alluvium
Slope: 0 to 3 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Low (About 6.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 24 to 60 inches
Runoff class: Negligible
Ecological site: Subirrigated - Veg. Zone 3
Land capability (irrigated): 3w
Land capability (nonirrigated): 3w

Typical Profile:
H1—0 to 14 inches; fine sandy loam
H2—14 to 80 inches; stratified fine sand

Minor Components
Wt At 0-1 Foot

Boc—Boel loam

Map Unit Composition

Boel: 100 percent

Component Descriptions
Boel
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Sandy alluvium
Slope: 0 to 3 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 6.7 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 24 to 60 inches
Runoff class: Negligible
Ecological site: Subirrigated - Veg. Zone 3
Land capability (irrigated): 3w
Land capability (nonirrigated): 3w

Typical Profile:
H1—0 to 14 inches; loam
H2—14 to 80 inches; fine sand

By—Breaks-Alluvial Land complex

Map Unit Composition

Coly: 50 percent
Hobbs: 50 percent

Component Descriptions
Coly
MLRA: 71 - Central Nebraska Loess Hills
Landform: Scarp on terrace on river valley
Parent material: Fine-silty calcareous loess
Slope: 4 to 30 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.9 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Limy Upland - Veg. Zone 3
Land capability (nonirrigated): 6e

Typical Profile:
H1—0 to 4 inches; silt loam
H2—4 to 60 inches; silt loam

Hobbs
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flood plain on river valley
Parent material: Stratified silty alluvium
Slope: 0 to 4 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.6 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Frequent
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Silty Overflow - Veg. Zone 3
Land capability (nonirrigated): 6w

Typical Profile:
H1—0 to 28 inches; silt loam
H2—28 to 60 inches; stratified silt loam

Minor Components
Wt At 0-1 Foot

CbC—Coly silt loam, 5 to 11 percent slopes

Map Unit Composition

Coly: 100 percent

Component Descriptions
Coly
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hillslope on upland
Parent material: Fine-silty calcareous loess
Slope: 5 to 11 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 12.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Limy Upland - Veg. Zone 3
Land capability (irrigated): 4e

Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 8 inches; silt loam
H2—8 to 80 inches; silt loam

CbE—Coly silt loam, 11 to 31 percent slopes

Map Unit Composition

Coly: 100 percent

Component Descriptions
Coly
MLRA: 71 - Central Nebraska Loess Hills
Landform: Break on upland, hillslope on upland
Parent material: Fine-silty calcareous loess
Slope: 11 to 31 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 12.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Limy Upland - Veg. Zone 3
Land capability (nonirrigated): 6e

Typical Profile:
H1—0 to 8 inches; silt loam
H2—8 to 80 inches; silt loam

Cm—Cass loam

Map Unit Composition

Cass: 100 percent

Component Descriptions
Cass
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Sandy alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 8.5 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Sandy Lowland - Veg. Zone 3
Land capability (irrigated): 1
Land capability (nonirrigated): 1

Typical Profile:
H1—0 to 17 inches; loam
H2—17 to 33 inches; fine sandy loam
H3—33 to 80 inches; fine sand

Coz—Cozad silt loam, 0 to 1 percent slopes

Map Unit Composition

Cozad: 100 percent

Component Descriptions
Cozad
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on terrace on river valley
Parent material: Coarse-silty alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Silty Lowland - Veg. Zone 3
Land capability (irrigated): 1
Land capability (nonirrigated): 2c

Typical Profile:
H1—0 to 18 inches; silt loam
H2—18 to 48 inches; loam
H3—48 to 80 inches; loam

Minor Components
Wt At 0-1 Foot

CozA—Cozad silt loam, 1 to 3 percent slopes

Map Unit Composition

Cozad: 100 percent

Component Descriptions
Cozad
MLRA: 71 - Central Nebraska Loess Hills
Landform: Terrace on river valley
Parent material: Coarse-silty alluvium
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Silty Lowland - Veg. Zone 3
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 18 inches; silt loam
H2—18 to 48 inches; loam
H3—48 to 80 inches; loam

CozB2—Cozad silt loam, 3 to 5 percent slopes, Eroded

Map Unit Composition

Cozad: 100 percent

Component Descriptions
Cozad
MLRA: 71 - Central Nebraska Loess Hills
Landform: Terrace on river valley
Parent material: Coarse-silty alluvium
Slope: 3 to 5 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.6 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Silty Lowland - Veg. Zone 3
Land capability (irrigated): 3e
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 7 inches; silt loam
H2—7 to 38 inches; loam
H3—38 to 80 inches; loam

CozC2—Cozad silt loam, 5 to 11 percent slopes, Eroded

Map Unit Composition
Cozad: 100 percent

Component Descriptions
Cozad
MLRA: 71 - Central Nebraska Loess Hills
Landform: Scarp on terrace on river valley
Parent material: Coarse-silty alluvium
Slope: 5 to 11 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.6 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Silty Lowland - Veg. Zone 3
Land capability (irrigated): 4e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 5 inches; silt loam
H2—5 to 40 inches; silt loam
H3—40 to 80 inches; loam

Cs—Cass fine sandy loam

Map Unit Composition

Cass: 100 percent

Component Descriptions
Cass
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Sandy alluvium
Slope: 0 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Moderate (About 7.7 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Sandy Lowland - Veg. Zone 3
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 11 inches; fine sandy loam
H2—11 to 33 inches; fine sandy loam
H3—33 to 60 inches; fine sand

CYE—Coly, Uly, And Hobbs Soils, 15 to 31 percent slopes

Map Unit Composition

Coly: 60 percent
Minor components: 40 percent

Component Descriptions
Coly
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hillslope on upland, break on upland
Parent material: Fine-silty calcareous loess
Slope: 15 to 31 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.9 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Limy Upland - Veg. Zone 3
Land capability (nonirrigated): 6e

Typical Profile:
H1—0 to 5 inches; silt loam
H2—5 to 60 inches; silt loam

Minor Components
Uly
Composition: About 20 percent
Slope: 15 to 31 percent
Drainage class: Well drained
Ecological site: Silty - Veg. Zone 3

Hobbs
Composition: About 20 percent
Slope: 3 to 6 percent
Drainage class: Well drained
Ecological site: Silty Overflow - Veg. Zone 3

Gg—Gibbon silt loam

Map Unit Composition

Gibbon: 100 percent

Component Descriptions
Gibbon
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Stratified calcareous silty alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 7.8 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 24 to 60 inches
Runoff class: Negligible
Ecological site: Subirrigated - Veg. Zone 3
Land capability (irrigated): 2w
Land capability (nonirrigated): 2w

Typical Profile:
H1—0 to 18 inches; silt loam
H2—18 to 33 inches; silt loam
H3—33 to 80 inches; stratified loamy sand to gravelly coarse sand

Gk—Grigston silt loam

Map Unit Composition

Grigston: 100 percent

Component Descriptions
Grigston
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Calcareous alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 9.9 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Silty Lowland - Veg. Zone 3
Land capability (irrigated): 1
Land capability (nonirrigated): 1

Typical Profile:
H1—0 to 12 inches; silt loam
H2—12 to 42 inches; stratified loam
H3—42 to 80 inches; fine sand

GP—Gravel Pit

Map Unit Composition

Pits: 100 percent

Component Descriptions
Pits
MLRA: 71 - Central Nebraska Loess Hills,73 - Rolling Plains and Breaks
Slope: 0 to 30 percent
Drainage class: Excessively drained
Slowest permeability: Rapid (About 6.00 in/hr)
Available water capacity: Low (About 3.5 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Land capability (nonirrigated): 8s

Ha—Hall silt loam, Terrace, 0 to 1 percent slopes

Map Unit Composition

Hall: 100 percent

Component Descriptions
Hall
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on interfluve on upland
Parent material: Loess
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Very high (About 12.0 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Silty Lowland - Veg. Zone 3
Land capability (irrigated): 1
Land capability (nonirrigated): 2c

Typical Profile:
H1—0 to 17 inches; silt loam
H2—17 to 29 inches; silty clay loam
H3—29 to 60 inches; silt loam

HaA—Hall silt loam, Terrace, 1 to 3 percent slopes

Map Unit Composition

Hall: 100 percent

Component Descriptions
Hall
MLRA: 71 - Central Nebraska Loess Hills
Landform: Interfluve on upland
Parent material: Loess
Slope: 1 to 3 percent
Drainage class: Well drained

Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.9 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Silty Lowland - Veg. Zone 3
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 13 inches; silt loam
H2—13 to 27 inches; silty clay loam
H3—27 to 60 inches; silt loam

Hb—Hobbs silt loam, 0 to 1 percent slopes

Map Unit Composition

Hord: 100 percent

Component Descriptions
Hord
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on terrace on river valley
Parent material: Colluvium and/or loess
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.4 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Silty Lowland - Veg. Zone 3
Land capability (irrigated): 1
Land capability (nonirrigated): 2c

Typical Profile:
H1—0 to 28 inches; silt loam
H2—28 to 38 inches; silt loam
H3—38 to 60 inches; silt loam

HbA—Hobbs silt loam, 1 to 3 percent slopes

Map Unit Composition

Hord: 100 percent

Component Descriptions
Hord
MLRA: 71 - Central Nebraska Loess Hills
Landform: Terrace on river valley
Parent material: Colluvium and/or loess
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.4 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Silty Lowland - Veg. Zone 3
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 28 inches; silt loam
H2—28 to 38 inches; silt loam
H3—38 to 60 inches; silt loam

HbB—Hobbs silt loam, 3 to 5 percent slopes

Map Unit Composition

Hord: 100 percent

Component Descriptions
Hord
MLRA: 71 - Central Nebraska Loess Hills
Landform: Terrace on river valley
Parent material: Colluvium and/or loess
Slope: 3 to 5 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.4 inches)

Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Silty - Veg. Zone 3
Land capability (irrigated): 3e
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 28 inches; silt loam
H2—28 to 38 inches; silt loam
H3—38 to 60 inches; silt loam

Hd—Hord silt loam, Terrace, 0 to 1 percent slopes

Map Unit Composition

Hord: 100 percent

Component Descriptions
Hord
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on terrace on river valley
Parent material: Colluvium and/or loess
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Silty Lowland - Veg. Zone 3
Land capability (irrigated): 1
Land capability (nonirrigated): 2c

Typical Profile:
H1—0 to 14 inches; silt loam
H2—14 to 48 inches; silt loam
H3—48 to 60 inches; silt loam

HdA—Hord silt loam, Terrace, 1 to 3 percent slopes

Map Unit Composition

Hord: 100 percent

Component Descriptions
Hord
MLRA: 71 - Central Nebraska Loess Hills
Landform: Terrace on river valley
Parent material: Colluvium and/or loess
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Silty Lowland - Veg. Zone 3
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 14 inches; silt loam
H2—14 to 48 inches; silt loam
H3—48 to 60 inches; silt loam

HoA—Holdrege silt loam, 1 to 3 percent slopes

Map Unit Composition

Holdrege: 100 percent

Component Descriptions
Holdrege
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on interfluve on upland
Parent material: Loess
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.4 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet

Runoff class: Low
Ecological site: Silty - Veg. Zone 3
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 13 inches; silt loam
H2—13 to 22 inches; silty clay loam
H3—22 to 28 inches; silt loam
H4—28 to 60 inches; silt loam

HoB—Holdrege silt loam, 3 to 5 percent slopes

Map Unit Composition

Holdrege: 100 percent

Component Descriptions
Holdrege
MLRA: 71 - Central Nebraska Loess Hills
Landform: Interfluve on upland
Parent material: Loess
Slope: 3 to 5 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.4 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Silty - Veg. Zone 3
Land capability (irrigated): 3e
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 13 inches; silt loam
H2—13 to 22 inches; silty clay loam
H3—22 to 28 inches; silt loam
H4—28 to 60 inches; silt loam

HoB2—Holdrege silt loam, 3 to 5 percent slopes, Eroded

Map Unit Composition
Holdrege: 100 percent

Component Descriptions
Holdrege
MLRA: 71 - Central Nebraska Loess Hills
Landform: Interfluve on upland
Parent material: Loess
Slope: 3 to 5 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.6 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Silty - Veg. Zone 3
Land capability (irrigated): 3e
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 10 inches; silt loam
H2—10 to 22 inches; silty clay loam
H3—22 to 60 inches; silt loam

HQ—Holdrege-Hall silt loams, 0 to 1 percent slopes

Map Unit Composition

Holdrege: 60 percent
Hall: 40 percent

Component Descriptions
Holdrege
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on interfluve on upland
Parent material: Loess
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.4 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low

Ecological site: Silty - Veg. Zone 3
Land capability (irrigated): 1
Land capability (nonirrigated): 2c

Typical Profile:
H1—0 to 13 inches; silt loam
H2—13 to 22 inches; silty clay loam
H3—22 to 28 inches; silt loam
H4—28 to 60 inches; silt loam

Hall
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on interfluve on upland
Parent material: Loess
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.0 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Ecological site: Silty - Veg. Zone 3
Land capability (irrigated): 1
Land capability (nonirrigated): 2c

Typical Profile:
H1—0 to 17 inches; silt loam
H2—17 to 29 inches; silty clay loam
H3—29 to 60 inches; silt loam

In—Inavale fine sandy loam, 0 to 3 percent slopes

Map Unit Composition

Inavale: 100 percent

Component Descriptions
Inavale
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Sandy alluvium
Slope: 0 to 3 percent
Drainage class: Excessively drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Low (About 5.5 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 60 to 72 inches
Runoff class: Negligible
Ecological site: Sandy Lowland - Veg. Zone 3
Land capability (irrigated): 3e
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 10 inches; fine sandy loam
H2—10 to 60 inches; fine sand

KCB—Kenesaw-Coly silt loams, 3 to 5 percent slopes

Map Unit Composition

Kenesaw: 60 percent
Coly: 40 percent

Component Descriptions
Kenesaw
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hummock on upland, flat on upland
Parent material: Calcareous loess
Slope: 3 to 5 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 12.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Silty - Veg. Zone 3
Land capability (irrigated): 3e
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 8 inches; silt loam
H2—8 to 22 inches; loam
H3—22 to 60 inches; silt loam

Coly
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hillslope on upland
Parent material: Fine-silty calcareous loess
Slope: 3 to 5 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 12.0 inches)

Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Limy Upland - Veg. Zone 3
Land capability (irrigated): 3e
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 8 inches; silt loam
H2—8 to 60 inches; silt loam

Ks—Kenesaw silt loam, 0 to 1 percent slopes

Map Unit Composition

Kenesaw: 100 percent

Component Descriptions
Kenesaw
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hummock on upland
Parent material: Calcareous loess
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 12.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Silty - Veg. Zone 3
Land capability (irrigated): 1
Land capability (nonirrigated): 2c

Typical Profile:
H1—0 to 8 inches; silt loam
H2—8 to 22 inches; loam
H3—22 to 60 inches; silt loam

KsA—Kenesaw silt loam, 1 to 3 percent slopes

Map Unit Composition

Kenesaw: 100 percent

Component Descriptions
Kenesaw
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hummock on upland
Parent material: Calcareous loess
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 12.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Silty - Veg. Zone 3
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 8 inches; silt loam
H2—8 to 22 inches; loam
H3—22 to 60 inches; silt loam

KsB—Kenesaw silt loam, 3 to 5 percent slopes

Map Unit Composition

Kenesaw: 100 percent

Component Descriptions
Kenesaw
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hummock on upland
Parent material: Calcareous loess
Slope: 3 to 5 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 12.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Silty - Veg. Zone 3

Land capability (irrigated): 3e
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 8 inches; silt loam
H2—8 to 22 inches; loam
H3—22 to 60 inches; silt loam

Lex—Lex silt loam

Map Unit Composition

Lex: 100 percent

Component Descriptions
Lex
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Loamy alluvium over sandy and gravelly alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 5.9 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 24 to 60 inches
Runoff class: Low
Ecological site: Subirrigated - Veg. Zone 3
Land capability (irrigated): 3w
Land capability (nonirrigated): 3w

Typical Profile:
H1—0 to 9 inches; silt loam
H2—9 to 18 inches; stratified sandy loam to silty clay loam
H3—18 to 24 inches; fine sandy loam
H4—24 to 60 inches; gravelly sand

Minor Components
Wt At 0-1 Foot

Lf—Leshara fine sandy loam

Map Unit Composition
Leshara: 100 percent

Component Descriptions
Leshara
MLRA: 73 - Rolling Plains and Breaks
Landform: Flat on flood plain on river valley
Parent material: Stratified loamy alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.8 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 24 to 60 inches
Runoff class: Negligible
Ecological site: Subirrigated - Veg. Zone 3
Land capability (irrigated): 2w
Land capability (nonirrigated): 2w

Typical Profile:
H1—0 to 9 inches; fine sandy loam
H2—9 to 51 inches; stratified loam to very fine sandy loam
H4—51 to 60 inches; coarse sand

Minor Components
Wt At 0-1 Foot

LG—Leshara And Gibbon silt loams

Map Unit Composition

Leshara: 50 percent
Gibbon: 50 percent

Component Descriptions
Leshara
MLRA: 73 - Rolling Plains and Breaks
Landform: Flat on flood plain on river valley
Parent material: Stratified loamy alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.2 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 24 to 60 inches

Runoff class: Negligible
Ecological site: Subirrigated - Veg. Zone 3
Land capability (irrigated): 2w
Land capability (nonirrigated): 2w

Typical Profile:
H1—0 to 9 inches; silt loam
H2—9 to 51 inches; stratified loam to very fine sandy loam
H3—51 to 60 inches; loamy sand

Gibbon
MLRA: 73 - Rolling Plains and Breaks
Landform: Flat on flood plain on river valley
Parent material: Stratified calcareous silty alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderate (About 0.57 in/hr)
Available water capacity: High (About 11.7 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 24 to 60 inches
Runoff class: Negligible
Ecological site: Subirrigated - Veg. Zone 3
Land capability (irrigated): 2w
Land capability (nonirrigated): 2w

Typical Profile:
H1—0 to 21 inches; silt loam
H2—21 to 33 inches; silt loam
H3—33 to 60 inches; stratified very fine sandy loam to silt loam

Minor Components
Wt At 0-1 Foot

Lm—Loup loam

Map Unit Composition

Loup: 100 percent

Component Descriptions
Loup
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Sandy alluvium
Slope: 0 to 1 percent
Drainage class: Very poorly drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 8.7 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 0 to 36 inches
Runoff class: Negligible
Ecological site: Wet Land - Veg. Zone 3
Land capability (nonirrigated): 5w

Typical Profile:
H1—0 to 10 inches; loam
H2—10 to 24 inches; loamy fine sand
H3—24 to 60 inches; fine sand

Lx—loamy Alluvial Land

Map Unit Composition

Gothenburg: 100 percent

Component Descriptions
Gothenburg
MLRA: 73 - Rolling Plains and Breaks
Landform: Flat on flood plain on river valley
Parent material: Sandy and gravelly alluvium
Slope: 0 to 3 percent
Drainage class: Poorly drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 3.6 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Frequent
Depth to seasonal water saturation: About 0 to 36 inches
Runoff class: Negligible
Land capability (nonirrigated): 7s

Typical Profile:
H1—0 to 11 inches; stratified loam to fine sandy loam
H2—11 to 80 inches; stratified coarse sand to gravelly coarse sand

Minor Components
Marsh

M—Marsh

Map Unit Composition

Fluvaquents: 100 percent

Component Descriptions
Fluvaquents
MLRA: 71 - Central Nebraska Loess Hills
Landform: Depression on flood plain on river valley
Parent material: Silty alluvium
Slope: 0 to 1 percent
Drainage class: Very poorly drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 4.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 0 to 0 inches
Runoff class: Negligible
Land capability (nonirrigated): 8w

Typical Profile:
H1—0 to 60 inches; stratified sandy loam to loamy fine sand

M-W—Miscellaneous Water (sewage Lagoons)

Map Unit Composition

Miscellaneous Water: 100 percent

Component Descriptions
Miscellaneous Water
MLRA: 71 - Central Nebraska Loess Hills,73 - Rolling Plains and Breaks
Depth to seasonal water saturation: More than 6 feet

OrC—Ortello fine sandy loam, 5 to 11 percent slopes

Map Unit Composition

Anselmo: 100 percent

Component Descriptions
Anselmo
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hillslope on upland
Parent material: Loamy eolian deposits
Slope: 5 to 11 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 7.8 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Sandy - Veg. Zone 3
Land capability (irrigated): 4e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 14 inches; fine sandy loam
H2—14 to 46 inches; loamy fine sand
H3—46 to 53 inches; fine sandy loam
H4—53 to 60 inches; silt loam

P—Platte Soils

Map Unit Composition

Platte: 100 percent

Component Descriptions
Platte
MLRA: 73 - Rolling Plains and Breaks
Landform: Flat on flood plain on river valley
Parent material: Loamy alluvium over sandy and gravelly alluvium
Slope: 0 to 3 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 4.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 24 to 60 inches
Runoff class: Very low
Ecological site: Subirrigated - Veg. Zone 3
Land capability (irrigated): 4w
Land capability (nonirrigated): 6w

Typical Profile:
H1—0 to 8 inches; sandy loam

H2—8 to 17 inches; fine sandy loam, loamy fine sand
H3—17 to 60 inches; gravelly coarse sand, gravelly sand

Minor Components
Wt At 0-1 Foot

PL—Platte-Alda complex

Map Unit Composition

Platte: 60 percent
Alda: 40 percent

Component Descriptions
Platte
MLRA: 73 - Rolling Plains and Breaks
Landform: Flat on flood plain on river valley
Parent material: Loamy alluvium over sandy and gravelly alluvium
Slope: 0 to 3 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 4.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 24 to 60 inches
Runoff class: Very low
Ecological site: Subirrigated - Veg. Zone 3
Land capability (irrigated): 4w
Land capability (nonirrigated): 6w

Typical Profile:
H1—0 to 8 inches; sandy loam
H2—8 to 17 inches; fine sandy loam, loamy fine sand
H3—17 to 60 inches; gravelly sand

Alda
MLRA: 73 - Rolling Plains and Breaks
Landform: Flat on flood plain on river valley
Parent material: Loamy alluvium over sandy and gravelly alluvium
Slope: 0 to 3 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Low (About 5.2 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 30 to 72 inches
Runoff class: Very low
Ecological site: Subirrigated - Veg. Zone 3
Land capability (irrigated): 3w
Land capability (nonirrigated): 3w

Typical Profile:
H1—0 to 8 inches; fine sandy loam
H2—8 to 26 inches; fine sandy loam
H3—26 to 60 inches; gravelly sand

Minor Components
Wt At 0-1 Foot

RB—Rough Broken Land, Loess

Map Unit Composition

Coly: 100 percent

Component Descriptions
Coly
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hillslope on upland, break on upland
Parent material: Fine-silty calcareous loess
Slope: 25 to 60 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.9 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Thin Loess - Veg. Zone 3
Land capability (nonirrigated): 7e

Typical Profile:
H1—0 to 3 inches; silt loam
H2—3 to 60 inches; silt loam

Ru—Rusco silt loam

Map Unit Composition

Rusco: 100 percent

Component Descriptions
Rusco
MLRA: 71 - Central Nebraska Loess Hills
Landform: Depression on upland
Parent material: Loamy eolian deposits over silty alluvium
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.9 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Ponding hazard: Rare
Depth to seasonal water saturation: About 6 to 12 inches
Runoff class: Negligible
Ecological site: Silty Lowland - Veg. Zone 3
Land capability (irrigated): 1
Land capability (nonirrigated): 2c

Typical Profile:
H1—0 to 10 inches; silt loam
H2—10 to 18 inches; silty clay loam
H3—18 to 60 inches; loam

Minor Components
Perched Wt

Ponded Soils

Rw—Riverwash

Map Unit Composition

Riverwash: 100 percent

Component Descriptions
Riverwash
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Sandy and gravelly alluvium
Slope: 0 to 1 percent
Drainage class: Very poorly drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Very low (About 1.9 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Frequent
Depth to seasonal water saturation: About 0 to 36 inches
Runoff class: Negligible
Land capability (nonirrigated): 8w

Sc—Scott silt loam

Map Unit Composition

Scott: 100 percent

Component Descriptions
Scott
MLRA: 71 - Central Nebraska Loess Hills
Landform: Depression on playa on upland
Parent material: Loess
Slope: 0 to 1 percent
Drainage class: Poorly drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: High (About 9.2 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Ponding hazard: Frequent
Depth to seasonal water saturation: About 0 to 12 inches
Runoff class: Negligible
Ecological site: No Site - Veg. Zone 3
Land capability (nonirrigated): 4w

Typical Profile:
H1—0 to 9 inches; silt loam
H2—9 to 42 inches; silty clay
H3—42 to 52 inches; silty clay loam
H4—52 to 60 inches; silt loam

SdA—Simeon sandy loam, 0 to 3 percent slopes

Map Unit Composition

Simeon: 100 percent

Component Descriptions
Simeon
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on terrace on river valley

Parent material: Sandy and gravelly alluvium
Slope: 0 to 3 percent
Drainage class: Excessively drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Low (About 5.3 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Shallow To Gravel - Veg. Zone 3
Land capability (irrigated): 4s
Land capability (nonirrigated): 6s

Typical Profile:
H1—0 to 9 inches; sandy loam
H2—9 to 60 inches; sand

Slc—Silver Creek silt loam

Map Unit Composition

Silver Creek: 100 percent

Component Descriptions
Silver Creek
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 9.0 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 36 to 72 inches
Runoff class: Medium
Ecological site: Subirrigated - Veg. Zone 3
Land capability (irrigated): 3w
Land capability (nonirrigated): 3w

Typical Profile:
H1—0 to 10 inches; silt loam
H2—10 to 27 inches; silty clay
H3—27 to 38 inches; silt loam
H4—38 to 42 inches; fine sandy loam
H5—42 to 60 inches; loamy fine sand, fine sand

Sx—sandy Alluvial Land

Map Unit Composition

Bolent: 100 percent

Component Descriptions
Bolent
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Sandy alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 4.7 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 36 to 72 inches
Runoff class: Negligible
Ecological site: Subirrigated - Veg. Zone 3
Land capability (nonirrigated): 6w

Typical Profile:
H1—0 to 5 inches; fine sand
H2—5 to 60 inches; stratified sand to fine sandy loam

Minor Components
Wet Alluvial Land

Loup
Slope: 0 to 1 percent
Drainage class: Very poorly drained
Ecological site: Wet Land - Veg. Zone 3

TsA—Thurman fine sandy loam, Terrace, 0 to 3 percent slopes

Map Unit Composition

Dunday: 100 percent

Component Descriptions
Dunday
MLRA: 71 - Central Nebraska Loess Hills
Landform: Sand sheet on terrace on sandhills
Parent material: Eolian sands
Slope: 0 to 3 percent
Drainage class: Somewhat excessively drained

Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Low (About 6.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy - Veg. Zone 3
Land capability (irrigated): 3e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 25 inches; fine sandy loam
H2—25 to 60 inches; fine sand

TXA—Thurman-Valentine loamy fine sands, 0 to 3 percent slopes

Map Unit Composition

Dunday: 60 percent
Valentine: 40 percent

Component Descriptions
Dunday
MLRA: 71 - Central Nebraska Loess Hills
Landform: Swale on sandhills
Parent material: Eolian sands
Slope: 0 to 3 percent
Drainage class: Somewhat excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 5.5 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy - Veg. Zone 3
Land capability (irrigated): 3e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 25 inches; loamy fine sand
H2—25 to 60 inches; fine sand

Valentine
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hummock on sandhills, ridge on sandhills
Parent material: Eolian sands
Slope: 0 to 3 percent
Drainage class: Excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 3.8 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy - Veg. Zone 3
Land capability (irrigated): 4e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 5 inches; loamy fine sand
H2—5 to 60 inches; fine sand

TXB—Thurman-Valentine loamy fine sands, 3 to 5 percent slopes

Map Unit Composition

Dunday: 60 percent
Valentine: 40 percent

Component Descriptions
Dunday
MLRA: 71 - Central Nebraska Loess Hills
Landform: Swale on sandhills
Parent material: Eolian sands
Slope: 3 to 5 percent
Drainage class: Somewhat excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 5.5 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy - Veg. Zone 3
Land capability (irrigated): 4e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 25 inches; loamy fine sand
H2—25 to 60 inches; fine sand

Valentine
MLRA: 71 - Central Nebraska Loess Hills
Landform: Ridge on sandhills, hummock on sandhills
Parent material: Eolian sands
Slope: 3 to 5 percent
Drainage class: Excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)

Available water capacity: Low (About 3.8 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sands - Veg. Zone 3
Land capability (irrigated): 4e
Land capability (nonirrigated): 6e

Typical Profile:
H1—0 to 5 inches; loamy fine sand
H2—5 to 60 inches; fine sand

TYA—Thurman-Valentine loamy fine sands, Terrace, 0 to 3 percent slopes

Map Unit Composition

Dunday: 60 percent
Valentine: 40 percent

Component Descriptions
Dunday
MLRA: 71 - Central Nebraska Loess Hills
Landform: Swale on terrace on river valley
Parent material: Eolian sands
Slope: 0 to 3 percent
Drainage class: Somewhat excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 5.5 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy - Veg. Zone 3
Land capability (irrigated): 3e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 25 inches; loamy fine sand
H2—25 to 60 inches; fine sand

Valentine
MLRA: 71 - Central Nebraska Loess Hills
Landform: Ridge on terrace on river valley, hummock on terrace on river valley
Parent material: Eolian sands
Slope: 0 to 3 percent
Drainage class: Excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 3.8 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy - Veg. Zone 3
Land capability (irrigated): 4e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 5 inches; loamy fine sand
H2—5 to 60 inches; fine sand

UHC—Uly And Holdrege silt loams, 5 to 11 percent slopes

Map Unit Composition

Uly: 50 percent
Holdrege: 50 percent

Component Descriptions
Uly
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hillslope on upland
Parent material: Fine-silty calcareous loess
Slope: 5 to 11 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Silty - Veg. Zone 3
Land capability (irrigated): 4e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 8 inches; silt loam
H2—8 to 14 inches; silt loam
H3—14 to 60 inches; silt loam

Holdrege
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hillslope on upland
Parent material: Loess
Slope: 5 to 11 percent

Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.4 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Silty - Veg. Zone 3
Land capability (irrigated): 4e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 13 inches; silt loam
H2—13 to 22 inches; silty clay loam
H3—22 to 28 inches; silt loam
H4—28 to 60 inches; silt loam

UHC2—Uly, Holdrege, And Coly Soils, 5 to 11 percent slopes, Eroded

Map Unit Composition

Uly: 40 percent
Holdrege: 30 percent
Coly: 30 percent

Component Descriptions
Uly
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hillslope on upland
Parent material: Fine-silty calcareous loess
Slope: 5 to 11 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Silty - Veg. Zone 3
Land capability (irrigated): 4e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 8 inches; silt loam
H2—8 to 14 inches; silt loam
H3—14 to 60 inches; silt loam

Holdrege
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hillslope on upland
Parent material: Loess
Slope: 5 to 11 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.2 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Silty - Veg. Zone 3
Land capability (irrigated): 4e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 10 inches; silt loam
H2—10 to 22 inches; silty clay loam
H3—22 to 28 inches; silt loam
H4—28 to 60 inches; silt loam

Coly
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hillslope on upland
Parent material: Fine-silty calcareous loess
Slope: 5 to 11 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 12.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Limy Upland - Veg. Zone 3
Land capability (irrigated): 4e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 8 inches; silt loam
H2—8 to 60 inches; silt loam

UsD—Uly silt loam, 11 to 15 percent slopes

Map Unit Composition

Uly: 100 percent

Component Descriptions
Uly
MLRA: 71 - Central Nebraska Loess Hills
Landform: Hillslope on upland
Parent material: Fine-silty calcareous loess
Slope: 11 to 15 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Silty - Veg. Zone 3
Land capability (nonirrigated): 6e

Typical Profile:
H1—0 to 8 inches; silt loam
H2—8 to 14 inches; silt loam
H3—14 to 60 inches; silt loam

VbC—Valentine loamy fine sand, 3 to 17 percent slopes

Map Unit Composition

Valentine: 100 percent

Component Descriptions
Valentine
MLRA: 71 - Central Nebraska Loess Hills
Landform: Dune on sandhills
Parent material: Eolian sands
Slope: 3 to 17 percent
Drainage class: Excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 3.8 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sands - Veg. Zone 3
Land capability (nonirrigated): 6e

Typical Profile:
H1—0 to 5 inches; loamy fine sand
H2—5 to 60 inches; fine sand

W—Water

Map Unit Composition

Water: 100 percent

Component Descriptions
Water
MLRA: 71 - Central Nebraska Loess Hills,73 - Rolling Plains and Breaks
Depth to seasonal water saturation: More than 6 feet

General Considerations: Water includes streams, lakes, ponds, and estuaries. These areas are covered with water in most years, at least during the period that is warm enough for plants to grow. Many areas are covered throughout the year.

Wb—Wann fine sandy loam

Map Unit Composition

Wann: 100 percent

Component Descriptions
Wann
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Calcareous loamy alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Moderate (About 8.5 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 36 to 60 inches
Runoff class: Negligible
Ecological site: Subirrigated - Veg. Zone 3
Land capability (irrigated): 2w
Land capability (nonirrigated): 2w

Typical Profile:
H1—0 to 13 inches; fine sandy loam
H2—13 to 60 inches; fine sandy loam

Minor Components
Wt At 0-1 Foot

Wm—Wann loam

Map Unit Composition

Wann: 100 percent

Component Descriptions
Wann
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Calcareous loamy alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 9.2 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 36 to 60 inches
Runoff class: Negligible
Ecological site: Subirrigated - Veg. Zone 3
Land capability (irrigated): 2w
Land capability (nonirrigated): 2w

Typical Profile:
H1—0 to 13 inches; loam
H2—13 to 60 inches; fine sandy loam

Minor Components
Wt At 0-1 Foot

Wr—Wood River silt loam, 0 to 1 percent slopes

Map Unit Composition

Wood River: 100 percent

Component Descriptions
Wood River
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on terrace on river valley
Parent material: Silty alluvium
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 11.1 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Clayey - Veg. Zone 3
Land capability (irrigated): 2s
Land capability (nonirrigated): 2s

Typical Profile:
H1—0 to 11 inches; silt loam
H2—11 to 36 inches; silty clay loam
H3—36 to 60 inches; silt loam

WrA—Wood River silt loam, 1 to 3 percent slopes

Map Unit Composition

Wood River: 100 percent

Component Descriptions
Wood River
MLRA: 71 - Central Nebraska Loess Hills
Landform: Terrace on river valley
Parent material: Silty alluvium
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 11.1 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Clayey - Veg. Zone 3
Land capability (irrigated): 3e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 11 inches; silt loam
H2—11 to 36 inches; silty clay

H3—36 to 60 inches; silt loam

WS—Wood River-Slickspots complex, 0 to 1 percent slopes

Map Unit Composition

Wood River: 70 percent
Gayville Variant: 30 percent

Component Descriptions
Wood River
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on terrace on river valley
Parent material: Silty alluvium
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 11.1 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Saline Lowland - Veg. Zone 3
Land capability (irrigated): 3s
Land capability (nonirrigated): 4s

Typical Profile:
H1—0 to 11 inches; silt loam
H2—11 to 36 inches; silty clay loam
H3—36 to 60 inches; silt loam

Gayville Variant
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on terrace on river valley
Parent material: Clayey alluvium over loamy alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Very high (About 12.0 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: About 36 to 72 inches
Runoff class: High
Ecological site: Saline Lowland - Veg. Zone 3
Land capability (irrigated): 4s
Land capability (nonirrigated): 4s

Typical Profile:
H1—0 to 16 inches; silt loam
H2—16 to 30 inches; clay loam
H3—30 to 60 inches; silt loam

Wx—Wet Alluvial Land

Map Unit Composition

Barney: 100 percent

Component Descriptions
Barney
MLRA: 71 - Central Nebraska Loess Hills
Landform: Flat on flood plain on river valley
Parent material: Loamy alluvium over sandy and gravelly alluvium
Slope: 0 to 1 percent
Drainage class: Very poorly drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 3.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Frequent
Depth to seasonal water saturation: About 0 to 36 inches
Runoff class: Negligible
Ecological site: Wet Land - Veg. Zone 3
Land capability (nonirrigated): 5w

Typical Profile:
H1—0 to 4 inches; silt loam
H2—4 to 60 inches; gravelly coarse sand

LAND CAPABILITY AND YIELDS PER ACRE OF CROPS
Buffalo County, Nebraska

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive land-forming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes. In the capability system, soils are generally grouped at three levels: capability class, subclass, and unit.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

(Class 1) soils have slight limitations that restrict their use.

(Class 2) soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

(Class 3) soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

(Class 4) soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

(Class 5) soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

(Class 6) soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

(Class 7) soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

(Class 8) soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, e, w, s, or c, to the class numeral, for example, 2e. The letter e shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; w shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); s shows that the soil is limited mainly because it is shallow, droughty, or stony; and c, used in only some parts of the United States, shows that the chief. limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by w, s, or c because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, forestland, wildlife habitat, or recreation.

Capability units are soil groups within a subclass. The soils in a capability unit are enough alike to be suited to the same crops and pasture plants, to require similar management, and to have similar productivity. Capability units are generally designated by adding an Arabic numeral to the subclass symbol, for example, 2e-4 and 3e-6. These units are not given in all soil surveys.

The capability classification of map units in this survey area is given in the section "Detailed Soil Map Units" and in the Land Capability and Component Yields table.

Crop Yield Estimates

The average yields per acre that can be expected of the principal crops under a high level of management are shown in "Land Capibility and Component Yields" table. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The land capability classification of map units in the survey area also is shown in the table.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations also are considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, animal waste manure, and green manure crops; and harvesting that ensures the smallest possible loss.

For yields of irrigated crops, it is assumed that the irrigation system is adapted to the soils and to the crops grown, that good-quality irrigation water is uniformly applied as needed, and that tillage is kept to a minimum.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in this table, are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service (NRCS) or the Cooperative Extension Service (CES) can provide information about the management and productivity of the soils for those crops.

LAND CAPABILITY AND YIELDS PER ACRE OF CROPS--Continued
Buffalo County, Nebraska
(Yields in the "N" columns are for nonirrigated soils; those in the "I" columns are for irrigated soils. Yields are those that can be expected under a high level of nonirrigated and irrigated management by component. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil)

Map symbol and soil name	Land Capability		Corn		Grain sorghum		Soybeans		Winter wheat	
	N	I	N	I	N	I	N	I	N	I
			Bu		Bu		Bu		Bu	
2Gg: GIBBON----------	4s	3s	---	99.00	---	95.00	---	---	---	---
2Hb: HOBBS----------	2w	2w	75.00	132.00	84.00	120.00	---	---	---	---
2Kt: COZAD----------	2e	2e	48.00	138.00	63.00	120.00	---	48.00	42.00	---
2Or: ANSELMO---------	2e	2e	42.00	132.00	49.00	115.00	---	48.00	35.00	---
2OrB2: ANSELMO---------	3e	3e	38.00	99.00	42.00	90.00	---	---	32.00	---
2Sc: SCOTT----------	3w	3w	38.00	121.00	46.00	110.00	---	---	---	---
2TXA: DUNDAY----------	4e	3e	33.00	105.00	39.00	95.00	---	---	25.00	---
VALENTINE-------	4e	4e	33.00	105.00	39.00	95.00	---	---	25.00	---
AED: ARENTS, EARTHEN DAM----------	8	---	---	---	---	---	---	---	---	---
Ax: ALDA----------	3w	3w	36.00	105.00	59.00	95.00	---	38.00	---	---
Ay: ALDA----------	3w	3w	39.00	110.00	63.00	100.00	---	44.00	---	---
Bdn: BLENDON---------	2e	2e	48.00	143.00	59.00	120.00	---	49.00	39.00	---
BdnA: ANSELMO---------	2e	2e	42.00	132.00	49.00	115.00	---	48.00	35.00	---
Bed: BLENDON---------	2c	1	50.00	154.00	64.00	125.00	---	50.00	42.00	---
BedA: ANSELMO---------	2e	2e	48.00	149.00	63.00	120.00	---	48.00	39.00	---
Bob: BOEL----------	3w	3w	38.00	105.00	46.00	95.00	---	---	---	---
Boc: BOEL----------	3w	3w	42.00	116.00	49.00	105.00	---	---	---	---
By: COLY----------	6e	---	---	---	---	---	---	---	---	---
HOBBS----------	6w	---	---	---	---	---	---	---	---	---
CbC: COLY----------	4e	4e	30.00	94.00	42.00	85.00	---	---	28.00	---
CbE: COLY----------	6e	---	---	---	---	---	---	---	---	---
Cm: CASS----------	1	1	47.00	132.00	70.00	120.00	---	50.00	42.00	---
Coz: COZAD----------	2c	1	53.00	154.00	66.00	125.00	---	50.00	42.00	---
CozA: COZAD----------	2e	2e	48.00	149.00	64.00	120.00	---	48.00	41.00	---
CozB2: COZAD----------	3e	3e	41.00	116.00	59.00	105.00	---	---	36.00	---
CozC2: COZAD----------	4e	4e	30.00	94.00	42.00	85.00	---	---	28.00	---
Cs: CASS----------	2e	2e	42.00	127.00	49.00	115.00	---	45.00	35.00	---

LAND CAPABILITY AND YIELDS PER ACRE OF CROPS--Continued
Buffalo County, Nebraska
(Yields in the "N" columns are for nonirrigated soils; those in the "I" columns are for irrigated soils. Yields are those that can be expected under a high level of nonirrigated and irrigated management by component. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil)

Map symbol and soil name	Land Capability		Corn		Grain sorghum		Soybeans		Winter wheat	
	N	I	N	I	N	I	N	I	N	I
			Bu		Bu		Bu		Bu	
CYE: COLY	6e	---	---	---	---	---	---	---	---	---
Gg: GIBBON	2w	2w	50.00	132.00	70.00	120.00	---	50.00	---	---
Gk: GRIGSTON	1	1	57.00	165.00	77.00	130.00	---	55.00	46.00	---
GP: PITS	8s	---	---	---	---	---	---	---	---	---
Ha: HALL	2c	1	56.00	165.00	70.00	125.00	---	55.00	42.00	---
HaA: HALL	2e	2e	51.00	154.00	66.00	120.00	---	50.00	42.00	---
Hb: HORD	2c	1	63.00	165.00	77.00	130.00	---	55.00	46.00	---
HbA: HORD	2e	2e	53.00	154.00	70.00	120.00	---	---	42.00	---
HbB: HORD	3e	3e	45.00	116.00	63.00	105.00	---	---	42.00	---
Hd: HORD	2c	1	60.00	165.00	70.00	125.00	---	55.00	42.00	---
HdA: HORD	2e	2e	53.00	154.00	66.00	120.00	---	45.00	42.00	---
HoA: HOLDREGE	2e	2e	51.00	154.00	66.00	120.00	---	50.00	42.00	---
HoB: HOLDREGE	3e	3e	47.00	116.00	63.00	105.00	---	---	36.00	---
HoB2: HOLDREGE	3e	3e	45.00	116.00	59.00	105.00	---	---	36.00	---
HQ: HOLDREGE	2c	1	54.00	165.00	70.00	125.00	---	55.00	42.00	---
HALL	2c	1	54.00	165.00	70.00	125.00	---	55.00	42.00	---
In: INAVALE	3e	3e	35.00	105.00	42.00	95.00	---	---	---	---
KCB: KENESAW	3e	3e	39.00	110.00	56.00	100.00	---	---	35.00	---
COLY	3e	3e	39.00	110.00	56.00	100.00	---	---	35.00	---
Ks: KENESAW	2c	1	53.00	154.00	66.00	125.00	---	50.00	42.00	---
KsA: KENESAW	2e	2e	48.00	143.00	64.00	120.00	---	48.00	41.00	---
KsB: KENESAW	3e	3e	---	---	---	---	---	---	---	---
Lex: LEX	3w	3w	39.00	110.00	53.00	100.00	---	42.00	---	---
Lf: LESHARA	2w	2w	44.00	116.00	64.00	105.00	---	45.00	---	---
LG: GIBBON	2w	2w	50.00	132.00	70.00	120.00	---	50.00	---	---
LESHARA	2w	2w	50.00	132.00	70.00	120.00	---	50.00	---	---
Lm: LOUP	5w	---	---	---	---	---	---	---	---	---
Lx: GOTHENBURG	7s	---	---	---	---	---	---	---	---	---

LAND CAPABILITY AND YIELDS PER ACRE OF CROPS--Continued
Buffalo County, Nebraska
(Yields in the "N" columns are for nonirrigated soils; those in the "I" columns are for irrigated soils. Yields are those that can be expected under a high level of nonirrigated and irrigated management by component. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil)

Map symbol and soil name	Land Capability		Corn		Grain sorghum		Soybeans		Winter wheat	
	N	I	N	I	N	I	N	I	N	I
			Bu		Bu		Bu		Bu	
M: FLUVAQUENTS-----	8w	---	---	---	---	---	---	---	---	---
M-W: MISCELLANEOUS WATER----------	---	---	---	---	---	---	---	---	---	---
OrC: ANSELMO---------	4e	4e	27.00	---	28.00	---	---	---	21.00	---
P: PLATTE----------	6w	4w	---	61.00	---	65.00	---	---	---	---
PL: PLATTE----------	6w	4w	---	72.00	---	70.00	---	---	---	---
ALDA----------	3w	3w	---	72.00	---	70.00	---	---	---	---
RB: COLY----------	7e	---	---	---	---	---	---	---	---	---
Ru: RUSCO----------	2c	1	53.00	165.00	70.00	125.00	---	50.00	---	---
Rw: RIVERWASH-------	8w	---	---	---	---	---	---	---	---	---
Sc: SCOTT----------	4w	---	---	---	---	---	---	---	---	---
SdA: SIMEON----------	6s	4s	---	---	---	---	---	---	---	---
Slc: SILVER CREEK----	3w	3w	44.00	116.00	64.00	105.00	---	45.00	---	---
Sx: BOLENT----------	6w	---	---	---	---	---	---	---	---	---
TsA: DUNDAY----------	4e	3e	45.00	116.00	49.00	105.00	---	---	34.00	---
TXA: DUNDAY----------	4e	3e	44.00	110.00	46.00	100.00	---	---	32.00	---
VALENTINE-------	4e	4e	44.00	110.00	46.00	100.00	---	---	32.00	---
TXB: DUNDAY----------	4e	4e	27.00	88.00	28.00	80.00	---	---	---	---
VALENTINE-------	6e	4e	27.00	88.00	28.00	80.00	---	---	---	---
TYA: DUNDAY----------	4e	3e	44.00	110.00	46.00	100.00	---	---	32.00	---
VALENTINE-------	4e	4e	44.00	110.00	46.00	100.00	---	---	32.00	---
UHC: HOLDREGE--------	4e	4e	---	---	---	---	---	---	---	---
ULY----------	4e	4e	---	---	---	---	---	---	---	---
UHC2: ULY----------	4e	4e	36.00	105.00	53.00	95.00	---	---	34.00	---
COLY----------	4e	4e	36.00	105.00	53.00	95.00	---	---	34.00	---
HOLDREGE--------	4e	4e	36.00	105.00	53.00	95.00	---	---	34.00	---
UsD: ULY----------	6e	---	---	---	---	---	---	---	---	---
VbC: VALENTINE-------	6e	---	---	---	---	---	---	---	---	---
W: WATER----------	---	---	---	---	---	---	---	---	---	---
Wb: WANN----------	2w	2w	47.00	132.00	66.00	120.00	---	---	---	---

LAND CAPABILITY AND YIELDS PER ACRE OF CROPS--Continued
Buffalo County, Nebraska
(Yields in the "N" columns are for nonirrigated soils; those in the "I" columns are for irrigated soils. Yields are those that can be expected under a high level of nonirrigated and irrigated management by component. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil)

Map symbol and soil name	Land Capability		Corn		Grain sorghum		Soybeans		Winter wheat	
	N	I	N	I	N	I	N	I	N	I
			Bu		Bu		Bu		Bu	
Wm:										
WANN----------	2w	2w	50.00	132.00	70.00	120.00	---	---	---	---
Wr:										
WOOD RIVER------	2s	2s	44.00	160.00	60.00	125.00	---	---	---	---
WrA:										
WOOD RIVER------	2e	3e	39.00	149.00	56.00	120.00	---	---	---	---
WS:										
WOOD RIVER------	4s	3s	39.00	105.00	56.00	100.00	---	---	---	---
GAYVILLE VARIANT	4s	4s	39.00	105.00	56.00	100.00	---	---	---	---
Wx:										
BARNEY----------	5w	---	---	---	---	---	---	---	---	---

Farmland Classification
Buffalo County, Nebraska : Out-of-date

Prime farmland is one of several kinds of important farmland defined by the U.S. Department of Agriculture. It is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil qualities, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. It is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

A recent trend in land use in some parts of the survey area has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

The map units in the survey area that are considered prime farmland are listed in the following table. This list does not constitute a recommendation for a particular land use. On some soils included in the list, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures. The extent of each listed map unit is shown in the "Acres and Proportionate Extent of Soils" table. The location is shown on the detailed soil maps. The soil qualities that affect use and management are described in other tables in this document."

Map symbol	Mapunit name	Farmland Classification
2Hb	Hobbs silt loam, occasionally flooded	All areas are prime farmland
2Kt	Kenesaw fine sandy loam, calcareous variant, 0 to 1 percent slopes	All areas are prime farmland
2Or	Ortello fine sandy loam, loamy substratum, 0 to 3 percent slopes	All areas are prime farmland
2OrB2	Ortello fine sandy loam, loamy substratum, 3 to 5 percent slopes, eroded	All areas are prime farmland
Bdn	Blendon fine sandy loam, 0 to 1 percent slopes	All areas are prime farmland
BdnA	Blendon fine sandy loam, 1 to 3 percent slopes	All areas are prime farmland
Bed	Blendon loam, 0 to 1 percent slopes	All areas are prime farmland
BedA	Blendon loam, 1 to 3 percent slopes	All areas are prime farmland
Cm	Cass loam	All areas are prime farmland
Coz	Cozad silt loam, 0 to 1 percent slopes	All areas are prime farmland
CozA	Cozad silt loam, 1 to 3 percent slopes	All areas are prime farmland
CozB2	Cozad silt loam, 3 to 5 percent slopes, eroded	All areas are prime farmland
Cs	Cass fine sandy loam	All areas are prime farmland
Gk	Grigston silt loam	All areas are prime farmland
Ha	Hall silt loam, terrace, 0 to 1 percent slopes	All areas are prime farmland
HaA	Hall silt loam, terrace, 1 to 3 percent slopes	All areas are prime farmland
Hb	Hobbs silt loam, 0 to 1 percent slopes	All areas are prime farmland
HbA	Hobbs silt loam, 1 to 3 percent slopes	All areas are prime farmland
HbB	Hobbs silt loam, 3 to 5 percent slopes	All areas are prime farmland
Hd	Hord silt loam, terrace, 0 to 1 percent slopes	All areas are prime farmland
HdA	Hord silt loam, terrace, 1 to 3 percent slopes	All areas are prime farmland
HoA	Holdrege silt loam, 1 to 3 percent slopes	All areas are prime farmland
HoB	Holdrege silt loam, 3 to 5 percent slopes	All areas are prime farmland
HoB2	Holdrege silt loam, 3 to 5 percent slopes, eroded	All areas are prime farmland
HQ	Holdrege-hall silt loams, 0 to 1 percent slopes	All areas are prime farmland
KCB	Kenesaw-coly silt loams, 3 to 5 percent slopes	All areas are prime farmland
Ks	Kenesaw silt loam, 0 to 1 percent slopes	All areas are prime farmland
KsA	Kenesaw silt loam, 1 to 3 percent slopes	All areas are prime farmland
KsB	Kenesaw silt loam, 3 to 5 percent slopes	All areas are prime farmland
Ru	Rusco silt loam	All areas are prime farmland
Wr	Wood river silt loam, 0 to 1 percent slopes	All areas are prime farmland
WrA	Wood river silt loam, 1 to 3 percent slopes	All areas are prime farmland
Ax	Alda fine sandy loam	Prime farmland if drained
Gg	Gibbon silt loam	Prime farmland if drained
Lex	Lex silt loam	Prime farmland if drained
Lf	Leshara fine sandy loam	Prime farmland if drained
LG	Leshara and gibbon silt loams	Prime farmland if drained
Wb	Wann fine sandy loam	Prime farmland if drained
Wm	Wann loam	Prime farmland if drained

SOIL RATING FOR PLANT GROWTH, modified 1998
Buffalo County, Nebraska

The "Soil Rating for Plant Growth, modified 1998" (SRPG) is a relative rating of the capacity of a soil to produce a specific plant under a defined management system. The index is determined from yield data on a few benchmark soils and is used to calculate yields, the net returns from crops, land assessment values, and taxes and to perform risk analysis when land management decisions are made. Specific information on plants and yields can be obtained from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Map symbol	Soil name	Crop Index
2Gg	Gibbon Silt Loam, Saline	50
2Hb	Hobbs Silt Loam, Occasionally Flooded	66
2Kt	Kenesaw Fine Sandy Loam, Calcareous Variant, 0 To 1 Percent Slopes	68
2Or	Ortello Fine Sandy Loam, Loamy Substratum, 0 To 3 Percent Slopes	50
2OrB2	Ortello Fine Sandy Loam, Loamy Substratum, 3 To 5 Percent Slopes, Eroded	49
2Sc	Scott Silt Loam, Drained	20
2TXA	Thurman-Valentine Loamy Fine Sands, Loamy Substratum, 0 To 3 Percent Slopes	32
AED	Arents, Earthen Dam	0
Ax	Alda Fine Sandy Loam	32
Ay	Alda Loam	37
Bdn	Blendon Fine Sandy Loam, 0 To 1 Percent Slopes	44
BdnA	Blendon Fine Sandy Loam, 1 To 3 Percent Slopes	55
Bed	Blendon Loam, 0 To 1 Percent Slopes	47
BedA	Blendon Loam, 1 To 3 Percent Slopes	58
Bob	Boel Fine Sandy Loam	29
Boc	Boel Loam	35
By	Breaks-Alluvial Land Complex	45
CYE	Coly, Uly, And Hobbs Soils, 15 To 31 Percent Slopes	30
CbC	Coly Silt Loam, 5 To 11 Percent Slopes	50
CbE	Coly Silt Loam, 11 To 31 Percent Slopes	29
Cm	Cass Loam	63
Coz	Cozad Silt Loam, 0 To 1 Percent Slopes	70
CozA	Cozad Silt Loam, 1 To 3 Percent Slopes	69
CozB2	Cozad Silt Loam, 3 To 5 Percent Slopes, Eroded	66
CozC2	Cozad Silt Loam, 5 To 11 Percent Slopes, Eroded	62
Cs	Cass Fine Sandy Loam	54
GP	Gravel Pit	18
Gg	Gibbon Silt Loam	48
Gk	Grigston Silt Loam	66
HQ	Holdrege-Hall Silt Loams, 0 To 1 Percent Slopes	72
Ha	Hall Silt Loam, Terrace, 0 To 1 Percent Slopes	74
HaA	Hall Silt Loam, Terrace, 1 To 3 Percent Slopes	73
Hb	Hobbs Silt Loam, 0 To 1 Percent Slopes	74
HbA	Hobbs Silt Loam, 1 To 3 Percent Slopes	74
HbB	Hobbs Silt Loam, 3 To 5 Percent Slopes	72
Hd	Hord Silt Loam, Terrace, 0 To 1 Percent Slopes	75
HdA	Hord Silt Loam, Terrace, 1 To 3 Percent Slopes	74
HoA	Holdrege Silt Loam, 1 To 3 Percent Slopes	72
HoB	Holdrege Silt Loam, 3 To 5 Percent Slopes	70
HoB2	Holdrege Silt Loam, 3 To 5 Percent Slopes, Eroded	70
In	Inavale Fine Sandy Loam, 0 To 3 Percent Slopes	35
KCB	Kenesaw-Coly Silt Loams, 3 To 5 Percent Slopes	62
Ks	Kenesaw Silt Loam, 0 To 1 Percent Slopes	70
KsA	Kenesaw Silt Loam, 1 To 3 Percent Slopes	69
KsB	Kenesaw Silt Loam, 3 To 5 Percent Slopes	67
LG	Leshara And Gibbon Silt Loams	62
Lex	Lex Silt Loam	38
Lf	Leshara Fine Sandy Loam	64
Lm	Loup Loam	38
Lx	Loamy Alluvial Land	20
M	Marsh	3
M-W	Miscellaneous Water (sewage Lagoons)	0
OrC	Ortello Fine Sandy Loam, 5 To 11 Percent Slopes	44
P	Platte Soils	32
PL	Platte-Alda Complex	32
RB	Rough Broken Land, Loess	3
Ru	Rusco Silt Loam	49
Rw	Riverwash	0
Sc	Scott Silt Loam	20
SdA	Simeon Sandy Loam, 0 To 3 Percent Slopes	30
Slc	Silver Creek Silt Loam	48
Sx	Sandy Alluvial Land	24
TXA	Thurman-Valentine Loamy Fine Sands, 0 To 3 Percent Slopes	31
TXB	Thurman-Valentine Loamy Fine Sands, 3 To 5 Percent Slopes	30
TYA	Thurman-Valentine Loamy Fine Sands, Terrace, 0 To 3 Percent Slopes	31
TsA	Thurman Fine Sandy Loam, Terrace, 0 To 3 Percent Slopes	38
UHC	Uly And Holdrege Silt Loams, 5 To 11 Percent Slopes	63
UHC2	Uly, Holdrege, And Coly Soils, 5 To 11 Percent Slopes, Eroded	59
UsD	Uly Silt Loam, 11 To 15 Percent Slopes	54
VbC	Valentine Loamy Fine Sand, 3 To 17 Percent Slopes	22
W	Water	0
WS	Wood River-Slickspots Complex, 0 To 1 Percent Slopes	25
Wb	Wann Fine Sandy Loam	46
Wm	Wann Loam	52
Wr	Wood River Silt Loam, 0 To 1 Percent Slopes	48
WrA	Wood River Silt Loam, 1 To 3 Percent Slopes	48
Wx	Wet Alluvial Land	18

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(Entries under "Erosion factors--T" apply to the entire profile. Entries under "K", "Kf", "Wind Erodibility Group" and "Wind Erodibility Index" apply only to the surface layer)

Map symbol and soil name	Percent	Irr Cap Class	Nonirr Cap Class	Prime Farmland	Hydro-logic Group	Range site name	Windbreak suitability group	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
								K	Kf	T		
2Gg:GIBBON------	100	3s-	4s	Not prime farmland	B	Saline Subirrigated - Veg. Zone 3		.32	.32	5	4L	86
2Hb:HOBBS-------	100	2w-	2w	All areas are prime farmland	B	Silty Overflow - Veg. Zone 3		.32	.32	5	6	48
2Kt:COZAD-------	100	2e-	2e	All areas are prime farmland	B	Silty Lowland - Veg. Zone 3		.20	.20	5	3	86
2Or:ANSELMO-----	100	2e-	2e	All areas are prime farmland	B	Sandy - Veg. Zone 3		.24	.24	5	3	86
2OrB2:ANSELMO---	100	3e-	3e	All areas are prime farmland	B	Sandy - Veg. Zone 3		.24	.24	5	3	86
2Sc:SCOTT-------	100	3w-	3w	Not prime farmland	D	Clayey Overflow - Veg. Zone 3		.37	.37	3	6	48
2TXA:DUNDAY-----	60	3e-	4e	Not prime farmland	A	Sandy - Veg. Zone 3		.17	.17	5	2	134
2TXA:VALENTINE--	40	4e-	4e	Not prime farmland	A	Sandy - Veg. Zone 3		.17	.17	5	2	134
AED:ARENTS, EARTHEN DAM----	100	N/A	8	Not prime farmland		Unspecified		---	---	-	---	---
Ax:ALDA---------	100	3w-	3w	Prime farmland if drained	C	Subirrigated - Veg. Zone 3		.20	.20	4	3	86
Ay:ALDA---------	100	3w-	3w	Not prime farmland	C	Subirrigated - Veg. Zone 3		.28	.28	4	5	56
Bdn:BLENDON-----	100	2e-	2e	All areas are prime farmland	B	Sandy - Veg. Zone 3		.20	.20	5	3	86
BdnA:ANSELMO----	100	2e-	2e	All areas are prime farmland	B	Sandy - Veg. Zone 3		.20	.20	5	3	86
Bed:BLENDON-----	100	1-	2c	All areas are prime farmland	B	Sandy - Veg. Zone 3		.28	.28	5	5	56
BedA:ANSELMO----	100	2e-	2e	All areas are prime farmland	B	Sandy - Veg. Zone 3		.28	.28	5	5	56
Bob:BOEL--------	100	3w-	3w	Not prime farmland	A	Subirrigated - Veg. Zone 3		.20	.20	3	3	86
Boc:BOEL--------	100	3w-	3w	Not prime farmland	A	Subirrigated - Veg. Zone 3		.28	.28	3	4L	86
By:COLY---------	50	N/A	6e	Not prime farmland	B	Limy Upland - Veg. Zone 3		.43	.43	5	4L	86

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(Entries under "Erosion factors--T" apply to the entire profile. Entries under "K", "Kf", "Wind Erodibility Group" and "Wind Erodibility Index" apply only to the surface layer)

Map symbol and soil name	Percent	Irr Cap Class	Nonirr Cap Class	Prime Farmland	Hydro-logic Group	Range site name	Windbreak suitability group	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
								K	Kf	T		
By:HOBBS--------	50	N/A	6w	Not prime farmland	B	Silty Overflow - Veg. Zone 3		.32	.32	5	6	48
CYE:COLY--------	60	N/A	6e	Not prime farmland	B	Limy Upland - Veg. Zone 3		.43	.43	5	4L	86
CbC:COLY--------	100	4e-	4e	Not prime farmland	B	Limy Upland - Veg. Zone 3		.43	.43	5	4L	86
CbE:COLY--------	100	N/A	6e	Not prime farmland	B	Limy Upland - Veg. Zone 3		.43	.43	5	4L	86
Cm:CASS---------	100	1-	1	All areas are prime farmland	B	Sandy Lowland - Veg. Zone 3		.28	.28	5	5	56
Coz:COZAD-------	100	1-	2c	All areas are prime farmland	B	Silty Lowland - Veg. Zone 3		.32	.32	5	6	48
CozA:COZAD------	100	2e-	2e	All areas are prime farmland	B	Silty Lowland - Veg. Zone 3		.32	.32	5	6	48
CozB2:COZAD-----	100	3e-	3e	All areas are prime farmland	B	Silty Lowland - Veg. Zone 3		.32	.32	5	6	48
CozC2:COZAD-----	100	4e-	4e	Not prime farmland	B	Silty Lowland - Veg. Zone 3		.32	.32	5	6	48
Cs:CASS---------	100	2e-	2e	All areas are prime farmland	B	Sandy Lowland - Veg. Zone 3		.20	.20	5	3	86
GP:PITS---------	100	N/A	8s	Not prime farmland	A	Unspecified		.10	.17	2	8	0
Gg:GIBBON-------	100	2w-	2w	Prime farmland if drained	B	Subirrigated - Veg. Zone 3		.32	.32	5	4L	86
Gk:GRIGSTON-----	100	1-	1	All areas are prime farmland	B	Silty Lowland - Veg. Zone 3		.32	.32	5	6	48
HQ:HOLDREGE-----	60	1-	2c	All areas are prime farmland	B	Silty - Veg. Zone 3		.32	.32	5	6	48
HQ:HALL---------	40	1-	2c	All areas are prime farmland	B	Silty - Veg. Zone 3		.32	.32	5	6	48
Ha:HALL---------	100	1-	2c	All areas are prime farmland	B	Silty Lowland - Veg. Zone 3		.32	.32	5	6	48
HaA:HALL--------	100	2e-	2e	All areas are prime farmland	B	Silty Lowland - Veg. Zone 3		.32	.32	5	6	48

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Map symbol and soil name	Percent	Irr Cap Class	Nonirr Cap Class	Prime Farmland	Hydro-logic Group	Range site name	Windbreak suitability group	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
								K	Kf	T		
Hb:HORD---------	100	1-	2c	All areas are prime farmland	B	Silty Lowland - Veg. Zone 3		.32	.32	5	6	48
HbA:HORD--------	100	2e-	2e	All areas are prime farmland	B	Silty Lowland - Veg. Zone 3		.32	.32	5	6	48
HbB:HORD--------	100	3e-	3e	All areas are prime farmland	B	Silty - Veg. Zone 3		.32	.32	5	6	48
Hd:HORD---------	100	1-	2c	All areas are prime farmland	B	Silty Lowland - Veg. Zone 3		.32	.32	5	6	48
HdA:HORD--------	100	2e-	2e	All areas are prime farmland	B	Silty Lowland - Veg. Zone 3		.32	.32	5	6	48
HoA:HOLDREGE----	100	2e-	2e	All areas are prime farmland	B	Silty - Veg. Zone 3		.32	.32	5	6	48
HoB:HOLDREGE----	100	3e-	3e	All areas are prime farmland	B	Silty - Veg. Zone 3		.32	.32	5	6	48
HoB2:HOLDREGE---	100	3e-	3e	All areas are prime farmland	B	Silty - Veg. Zone 3		.32	.32	5	6	48
In:INAVALE------	100	3e-	3e	Not prime farmland	A	Sandy Lowland - Veg. Zone 3		.24	.24	5	3	86
KCB:KENESAW-----	60	3e-	3e	All areas are prime farmland	B	Silty - Veg. Zone 3		.32	.32	5	6	48
KCB:COLY--------	40	3e-	3e	All areas are prime farmland	B	Limy Upland - Veg. Zone 3		.43	.43	5	4L	86
Ks:KENESAW------	100	1-	2c	All areas are prime farmland	B	Silty - Veg. Zone 3		.32	.32	5	6	48
KsA:KENESAW-----	100	2e-	2e	All areas are prime farmland	B	Silty - Veg. Zone 3		.32	.32	5	6	48
KsB:KENESAW-----	100	3e-	3e	All areas are prime farmland	B	Silty - Veg. Zone 3		.32	.32	5	6	48
LG:LESHARA------	50	2w-	2w	Prime farmland if drained	B	Subirrigated - Veg. Zone 3		.32	.32	5	6	48
LG:GIBBON-------	50	2w-	2w	Prime farmland if drained	B	Subirrigated - Veg. Zone 3		.32	.32	5	4L	86

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Map symbol and soil name	Percent	Irr Cap Class	Nonirr Cap Class	Prime Farmland	Hydro-logic Group	Range site name	Windbreak suitability group	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
								K	Kf	T		
Lex:LEX---------	100	3w-	3w	Prime farmland if drained	B	Subirrigated - Veg. Zone 3		.32	.32	4	4L	86
Lf:LESHARA------	100	2w-	2w	Prime farmland if drained	B	Subirrigated - Veg. Zone 3		.20	.20	5	3	86
Lm:LOUP---------	100	N/A	5w	Not prime farmland	D	Wet Land - Veg. Zone 3		.24	.24	3	8	0
Lx:GOTHENBURG---	100	N/A	7s	Not prime farmland	D	Unspecified		.32	.32	5	8	0
M:FLUVAQUENTS---	100	N/A	8w	Not prime farmland	D	Unspecified		.17	.17	5	8	0
M-W:MISCELLANEOUS WATER----------	100	N/A	N/A	Not prime farmland		Unspecified		---	---	-	---	---
OrC:ANSELMO-----	100	4e-	4e	Not prime farmland	B	Sandy - Veg. Zone 3		.24	.24	5	3	86
P:PLATTE--------	100	4w-	6w	Not prime farmland	B	Subirrigated - Veg. Zone 3		.20	.20	3	3	86
PL:PLATTE-------	60	4w-	6w	Not prime farmland	B	Subirrigated - Veg. Zone 3		.20	.20	3	3	86
PL:ALDA---------	40	3w-	3w	Not prime farmland	C	Subirrigated - Veg. Zone 3		.20	.20	4	3	86
RB:COLY---------	100	N/A	7e	Not prime farmland	B	Thin Loess - Veg. Zone 3		.43	.43	5	4L	86
Ru:RUSCO--------	100	1-	2c	All areas are prime farmland	C	Silty Lowland - Veg. Zone 3		.32	.32	5	5	56
Rw:RIVERWASH----	100	N/A	8w	Not prime farmland	D	Unspecified		.15	.15	5	8	0
Sc:SCOTT--------	100	N/A	4w	Not prime farmland	D	No Site - Veg. Zone 3		.37	.37	3	6	48
SdA:SIMEON------	100	4s-	6s	Not prime farmland	A	Shallow To Gravel - Veg. Zone 3		.24	.24	5	3	86
Slc:SILVER CREEK	100	3w-	3w	Not prime farmland	D	Subirrigated - Veg. Zone 3		.32	.32	2	6	48
Sx:BOLENT-------	100	N/A	6w	Not prime farmland	A	Subirrigated - Veg. Zone 3		.15	.15	5	1	220
TXA:DUNDAY------	60	3e-	4e	Not prime farmland	A	Sandy - Veg. Zone 3		.17	.17	5	2	134
TXA:VALENTINE---	40	4e-	4e	Not prime farmland	A	Sandy - Veg. Zone 3		.17	.17	5	2	134

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Map symbol and soil name	Percent	Irr Cap Class	Nonirr Cap Class	Prime Farmland	Hydro-logic Group	Range site name	Windbreak suitability group	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
								K	Kf	T		
TXB:DUNDAY------	60	4e-	4e	Not prime farmland	A	Sandy - Veg. Zone 3		.17	.17	5	2	134
TXB:VALENTINE---	40	4e-	6e	Not prime farmland	A	Sands - Veg. Zone 3		.17	.17	5	2	134
TYA:DUNDAY------	60	3e-	4e	Not prime farmland	A	Sandy - Veg. Zone 3		.17	.17	5	2	134
TYA:VALENTINE---	40	4e-	4e	Not prime farmland	A	Sandy - Veg. Zone 3		.17	.17	5	2	134
TsA:DUNDAY------	100	3e-	4e	Not prime farmland	A	Sandy - Veg. Zone 3		.20	.20	3	3	86
UHC:ULY---------	50	4e-	4e	Not prime farmland	B	Silty - Veg. Zone 3		.32	.32	5	6	48
UHC:HOLDREGE----	50	4e-	4e	Not prime farmland	B	Silty - Veg. Zone 3		.32	.32	5	6	48
UHC2:ULY--------	40	4e-	4e	Not prime farmland	B	Silty - Veg. Zone 3		.32	.32	5	6	48
UHC2:HOLDREGE---	30	4e-	4e	Not prime farmland	B	Silty - Veg. Zone 3		.32	.32	5	6	48
UHC2:COLY-------	30	4e-	4e	Not prime farmland	B	Limy Upland - Veg. Zone 3		.43	.43	5	4L	86
UsD:ULY---------	100	N/A	6e	Not prime farmland	B	Silty - Veg. Zone 3		.32	.32	5	6	48
VbC:VALENTINE---	100	N/A	6e	Not prime farmland	A	Sands - Veg. Zone 3		.17	.17	5	2	134
W:WATER---------	100	N/A	N/A	Not prime farmland		Unspecified		---	---	-	---	0
WS:WOOD RIVER---	70	3s-	4s	Not prime farmland	D	Saline Lowland - Veg. Zone 3		.37	.37	2	6	48
WS:GAYVILLE VARIANT--------	30	4s-	4s	Not prime farmland	C	Saline Lowland - Veg. Zone 3		.32	.32	2	5	56
Wb:WANN---------	100	2w-	2w	Prime farmland if drained	B	Subirrigated - Veg. Zone 3		.20	.20	5	3	86
Wm:WANN---------	100	2w-	2w	Prime farmland if drained	B	Subirrigated - Veg. Zone 3		.28	.28	5	5	56
Wr:WOOD RIVER---	100	2s-	2s	All areas are prime farmland	D	Clayey - Veg. Zone 3		.37	.37	2	6	48
WrA:WOOD RIVER--	100	3e-	2e	All areas are prime farmland	D	Clayey - Veg. Zone 3		.37	.37	2	6	48

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(Entries under "Erosion factors--T" apply to the entire profile. Entries under "K", "Kf", "Wind Erodibility Group" and "Wind Erodibility Index" apply only to the surface layer)

Map symbol and soil name	Percent	Irr Cap Class	Nonirr Cap Class	Prime Farmland	Hydro-logic Group	Range site name	Windbreak suitability group	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
								K	Kf	T		
Wx:BARNEY-------	100	N/A	5w	Not prime farmland	D	Wet Land - Veg. Zone 3		.32	.32	5	8	0

RANGELAND PRODUCTIVITY
Buffalo County, Nebraska

Use and Explanation of Rangeland, Grazed Forest Land, Native Pastureland Interpretations

Information in this subsection can be used to plan the use and management of soils for rangeland, grazed forest land, and native pasture. Different kinds of soils vary in their capacity to produce native grasses and other plants suitable for grazing. Information in this subsection provides groupings of similar soils and estimates of potential forage production, which can be used to determine livestock stocking rates.

Rangeland. Range is land on which the native vegetation (climax or natural potential plant community) is predominantly grasses, grasslike plants, forbs, and shrubs suitable for grazing and browsing. Range includes natural grasslands, savannas, many wetlands, some deserts, tundra, and certain shrub and forb communities. Rangeland receives no regular or frequent cultural treatment. The composition and production of the plant community are determined by soil, climate, topography, overstory canopy, and grazing management.

Grazed Forest Land. Includes land on which the understory includes, as an integral part of the forest plant community, plants that can be grazed without significantly impairing other forest values.

Native Pasture. Includes land on which the native vegetation (climax or natural potential plant community) is forest but which is used and managed primarily for production of native plants for forage. Native pasture includes cut-over forest land and forest land cleared and now managed for native or naturalized forage plants.

Rangeland

In areas that have similar climate and topography, differences in the kind and amount of vegetation produced on rangeland are closely related to the kind of soil. Effective management based on the relationship between the soils and vegetation and water.

The Rangeland, Grazed Forest land, Native Pastureland Interpretations shows, for each soil that supports rangeland vegetation, the ecological site and the potential annual production of vegetation in favorable, normal, unfavorable years. An explanation of the column headings in this table follows.

An ecological site is the product of all the environmental factors responsible for its development. It has characteristic soils that have developed over time throughout the soil development process; a characteristic hydrology, particularly infiltration and runoff, that has developed over time; and a characteristic plant community (kind and amount of vegetation). The hydrology of a site is influenced by development of the soil and plant community. The vegetation, soils, and hydrology are all interrelated. Each is influenced by the others and influences the development of the others. The plant community on an ecological site is typified by an association of species that differs from that of other ecological sites in the kind and/or proportion of species or in total production. Descriptions of ecological sites are provided in the Field Office Technical Guide, which is available in local offices of the Natural Resources Conservation Service.

Total dry-weight production is the amount of vegetation that can be expected to grow annually on well managed rangeland that is supporting the potential natural plant community. It includes all vegetation, whether or not it is palatable to grazing animals. It includes the current year's growth of leaves, twigs, and fruits of woody plants. It does not include the increase in stem diameter of trees and shrubs. It is expressed in pounds per acre of air-dry vegetation for favorable, average, and unfavorable years. In a favorable year, the amount and distribution of precipitation and the temperatures make growing conditions substantially better than average. In a normal year, growing conditions are about average. In an unfavorable year, growing conditions are well below average, generally because of low available soil moisture. Yields are adjusted to a common percent of air-dry moisture content.

Range management requires a knowledge of the kinds of soil and of the potential natural plant community. It also requires an evaluation of the present range similarity index and rangeland trend. Range similarity index is determined by comparing the present plant community with the potential natural plant community on a particular rangeland ecological site. The more closely the existing community resembles the potential community, the higher the range similarity index. Rangeland trend is defined as the direction of change in an existing plant community relative to the potential natural plant community. Further information about the range similarity index and rangeland trend is available in chapter 4 of the National Range and Pasture Handbook, which is available in local offices of the Natural Resources Conservation Service. The objective in range management is to control grazing so that the plants growing on a site are about the same in kind and amount as the potential natural plant community for that site. Such management generally results in the optimum production of vegetation, control of undesirable brush species, conservation of water, and control of erosion. Sometimes, however, an area with a range similarity index somewhat below the potential meets grazing needs, provides wildlife habitat, and protects soil and water resources.

RANGELAND PRODUCTIVITY--Continued
Buffalo County, Nebraska

(Only the soils that support rangeland vegetation suitable for grazing are rated.) Refer to range site description to determine the percentage allowable of grasses, forbs, and shrubs for the range ecological site.

Map symbol and soil name	Ecological site	Total dry-weight production		
		Favorable year	Average year	Unfavorable year
		Lb/acre	Lb/acre	Lb/acre
2Gg:				
Gibbon	Saline Subirrigated - Veg. Zone 3	4,000	3,800	3,500
2Hb:				
Hobbs	Silty Overflow - Veg. Zone 3	4,500	4,000	3,800
2Kt:				
Cozad	Silty Lowland - Veg. Zone 3	4,500	3,800	3,000
2Or:				
Anselmo	Sandy - Veg. Zone 3	3,500	3,300	3,000
2OrB2:				
Anselmo	Sandy - Veg. Zone 3	3,500	3,300	3,000
2Sc:				
Scott	Clayey Overflow - Veg. Zone 3	2,800	2,200	1,700
2TXA:				
Dunday	Sandy - Veg. Zone 3	3,300	3,000	2,600
Valentine	Sandy - Veg. Zone 3	3,300	3,000	2,600
AED:				
Arents, Earthen Dam	---	---	---	---
Ax:				
Alda	Subirrigated - Veg. Zone 3	5,200	4,900	4,600
Ay:				
Alda	Subirrigated - Veg. Zone 3	5,200	4,900	4,600
Bdn:				
Blendon	Sandy - Veg. Zone 3	3,500	2,900	2,000
BdnA:				
Anselmo	Sandy - Veg. Zone 3	3,500	3,300	3,000
Bed:				
Blendon	Sandy - Veg. Zone 3	3,500	2,900	2,000
BedA:				
Anselmo	Sandy - Veg. Zone 3	3,500	3,300	3,000
Bob:				
Boel	Subirrigated - Veg. Zone 3	5,200	4,900	4,600
Boc:				
Boel	Subirrigated - Veg. Zone 3	5,200	4,900	4,600
By:				
Coly	Limy Upland - Veg. Zone 3	3,300	3,000	2,700
Hobbs	Silty Overflow - Veg. Zone 3	4,500	4,000	3,800
CbC:				
Coly	Limy Upland - Veg. Zone 3	3,300	3,000	2,700
CbE:				
Coly	Limy Upland - Veg. Zone 3	3,300	3,000	2,700
Cm:				
Cass	Sandy Lowland - Veg. Zone 3	4,500	4,200	3,800
Coz:				
Cozad	Silty Lowland - Veg. Zone 3	4,500	4,200	3,800
CozA:				
Cozad	Silty Lowland - Veg. Zone 3	4,500	4,200	3,800
CozB2:				
Cozad	Silty Lowland - Veg. Zone 3	3,700	3,200	2,700
CozC2:				
Cozad	Silty Lowland - Veg. Zone 3	3,700	3,200	2,700
Cs:				
Cass	Sandy Lowland - Veg. Zone 3	3,500	3,200	3,000
CYE:				
Coly	Limy Upland - Veg. Zone 3	3,300	3,000	2,700
Gg:				
Gibbon	Subirrigated - Veg. Zone 3	5,500	5,300	5,000
Gk:				
Grigston	Silty Lowland - Veg. Zone 3	5,000	4,000	3,000
GP:				
Pits	---	---	---	---
Ha:				
Hall	Silty Lowland - Veg. Zone 3	4,000	3,600	3,300
HaA:				
Hall	Silty Lowland - Veg. Zone 3	4,000	3,600	3,300
Hb:				
Hord	Silty Lowland - Veg. Zone 3	4,500	4,200	3,800
HbA:				
Hord	Silty Lowland - Veg. Zone 3	4,500	4,200	3,800
HbB:				
Hord	Silty - Veg. Zone 3	4,000	3,600	3,300
Hd:				
Hord	Silty Lowland - Veg. Zone 3	4,500	4,200	3,800
HdA:				
Hord	Silty Lowland - Veg. Zone 3	4,500	4,200	3,800
HoA:				
Holdrege	Silty - Veg. Zone 3	4,000	3,600	3,300
HoB:				
Holdrege	Silty - Veg. Zone 3	4,000	3,600	3,300
HoB2:				
Holdrege	Silty - Veg. Zone 3	4,000	3,600	3,300
HQ:				
Holdrege	Silty - Veg. Zone 3	4,000	3,600	3,300
Hall	Silty - Veg. Zone 3	4,000	3,600	3,300
In:				

RANGELAND PRODUCTIVITY--Continued
Buffalo County, Nebraska

(Only the soils that support rangeland vegetation suitable for grazing are rated.) Refer to range site description to determine the percentage allowable of grasses, forbs, and shrubs for the range ecological site.

Map symbol and soil name	Ecological site	Total dry-weight production		
		Favorable year	Average year	Unfavorable year
		Lb/acre	Lb/acre	Lb/acre
Inavale	Sandy Lowland - Veg. Zone 3	3,800	3,500	3,000
KCB:				
Kenesaw	Silty - Veg. Zone 3	4,000	3,600	3,300
Coly	Limy Upland - Veg. Zone 3	3,300	3,000	2,700
Ks:				
Kenesaw	Silty - Veg. Zone 3	4,000	3,600	3,300
KsA:				
Kenesaw	Silty - Veg. Zone 3	4,000	3,600	3,300
KsB:				
Kenesaw	Silty - Veg. Zone 3	4,000	3,600	3,300
Lex:				
Lex	Subirrigated - Veg. Zone 3	5,200	4,900	4,600
Lf:				
Leshara	Subirrigated - Veg. Zone 3	5,500	5,300	5,000
LG:				
Gibbon	Subirrigated - Veg. Zone 3	5,500	5,300	5,000
Leshara	Subirrigated - Veg. Zone 3	5,500	5,300	5,000
Lm:				
Loup	Wet Land - Veg. Zone 3	6,000	5,600	5,300
Lx:				
Gothenburg	---	---	---	---
M:				
Fluvaquents	---	---	---	---
M-W:				
Miscellaneous Water	---	---	---	---
OrC:				
Anselmo	Sandy - Veg. Zone 3	3,500	3,300	3,000
P:				
Platte	Subirrigated - Veg. Zone 3	5,000	4,600	4,200
PL:				
Platte	Subirrigated - Veg. Zone 3	5,000	4,600	4,200
Alda	Subirrigated - Veg. Zone 3	5,200	4,900	4,600
RB:				
Coly	Thin Loess - Veg. Zone 3	2,800	2,600	2,400
Ru:				
Rusco	Silty Lowland - Veg. Zone 3	4,500	3,800	3,000
Rw:				
Riverwash	---	---	---	---
Sc:				
Scott	No Site - Veg. Zone 3	3,900	3,300	2,300
SdA:				
Simeon	Shallow To Gravel - Veg. Zone 3	1,800	1,600	1,100
Slc:				
Silver Creek	Subirrigated - Veg. Zone 3	5,200	4,900	4,600
Sx:				
Bolent	Subirrigated - Veg. Zone 3	5,500	5,000	4,200
TsA:				
Dunday	Sandy - Veg. Zone 3	3,300	3,000	2,600
TXA:				
Dunday	Sandy - Veg. Zone 3	3,300	3,000	2,600
Valentine	Sandy - Veg. Zone 3	3,300	3,000	2,600
TXB:				
Dunday	Sandy - Veg. Zone 3	3,300	3,000	2,600
Valentine	Sands - Veg. Zone 3	3,000	2,600	2,200
TYA:				
Dunday	Sandy - Veg. Zone 3	3,300	3,000	2,600
Valentine	Sandy - Veg. Zone 3	3,300	3,000	2,600
UHC:				
Holdrege	Silty - Veg. Zone 3	4,000	3,600	3,300
Uly	Silty - Veg. Zone 3	3,700	3,200	2,700
UHC2:				
Uly	Silty - Veg. Zone 3	3,700	3,200	2,700
Coly	Limy Upland - Veg. Zone 3	4,000	3,600	3,200
Holdrege	Silty - Veg. Zone 3	4,000	3,600	3,300
UsD:				
Uly	Silty - Veg. Zone 3	3,700	3,200	2,700
VbC:				
Valentine	Sands - Veg. Zone 3	3,000	2,600	2,200
W:				
Water	---	---	---	---
Wb:				
Wann	Subirrigated - Veg. Zone 3	5,500	5,300	5,000
Wm:				
Wann	Subirrigated - Veg. Zone 3	5,500	5,300	5,000
Wr:				
Wood River	Clayey - Veg. Zone 3	3,800	3,000	2,200
WrA:				
Wood River	Clayey - Veg. Zone 3	3,800	3,000	2,200
WS:				
Wood River	Saline Lowland - Veg. Zone 3	3,000	2,400	1,700
Gayville Variant	Saline Lowland - Veg. Zone 3	2,200	2,000	1,700
Wx:				
Barney	Wet Land - Veg. Zone 3	6,000	5,400	5,000

BUILDING SITE DEVELOPMENT
Buffalo County, Nebraska

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. These tables show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. Not limited indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. Slightly limited indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. Somewhat limited indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. Very limited indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

BUILDING SITE DEVELOPMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2Gg:							
Gibbon	100	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	1.00	Shrink-swell	0.50
		Depth to saturated zone	0.39	Shrink-swell	0.50	Depth to saturated zone	0.39
2Hb:							
Hobbs	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
2Kt:							
Cozad	100	Not limited		Not limited		Not limited	
2Or:							
Anselmo	100	Not limited		Not limited		Not limited	
2OrB2:							
Anselmo	100	Not limited		Not limited		Somewhat limited	
						Slope	0.00
2Sc:							
Scott	100	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
2TXA:							
Dunday	60	Not limited		Not limited		Not limited	
Valentine	40	Not limited		Not limited		Not limited	
AED:							
Arents, Earthen Dam-	100	Not rated		Not rated		Not rated	
Ax:							
Alda	100	Not limited		Very limited		Not limited	
				Depth to saturated zone	1.00		
Ay:							
Alda	100	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.39	Depth to saturated zone	1.00	Depth to saturated zone	0.39
Bdn:							
Blendon	100	Not limited		Not limited		Not limited	
BdnA:							
Anselmo	100	Not limited		Not limited		Not limited	
Bed:							
Blendon	100	Not limited		Not limited		Not limited	
BedA:							
Anselmo	100	Not limited		Not limited		Not limited	
Bob:							
Boel	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	1.00	Depth to saturated zone	0.39
Boc:							
Boel	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	1.00	Depth to saturated zone	0.39
By:							
Coly	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Hobbs	50	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
CbC:							
Coly	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.00	Slope	0.00	Slope	1.00
CbE:							
Coly	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Cm:							
Cass	100	Not limited		Not limited		Not limited	
Coz:							
Cozad	100	Not limited		Not limited		Not limited	
CozA:							
Cozad	100	Not limited		Not limited		Not limited	
CozB2:							
Cozad	100	Not limited		Not limited		Somewhat limited	
						Slope	0.00
CozC2:							
Cozad	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.00	Slope	0.00	Slope	1.00

BUILDING SITE DEVELOPMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Cs:							
Cass	100	Not limited		Not limited		Not limited	
CYE:							
Coly	60	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Gg:							
Gibbon	100	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
Gk:							
Grigston	100	Not limited		Not limited		Not limited	
GP:							
Pits	100	Not rated		Not rated		Not rated	
Ha:							
Hall	100	Somewhat limited Shrink-swell	0.50	Not limited		Somewhat limited Shrink-swell	0.50
HaA:							
Hall	100	Somewhat limited Shrink-swell	0.50	Not limited		Somewhat limited Shrink-swell	0.50
Hb:							
Hord	100	Not limited		Not limited		Not limited	
HbA:							
Hord	100	Not limited		Not limited		Not limited	
HbB:							
Hord	100	Not limited		Not limited		Somewhat limited Slope	0.00
Hd:							
Hord	100	Not limited		Not limited		Not limited	
HdA:							
Hord	100	Not limited		Not limited		Not limited	
HoA:							
Holdrege	100	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
HoB:							
Holdrege	100	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell Slope	0.50 0.00
HoB2:							
Holdrege	100	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell Slope	0.50 0.00
HQ:							
Holdrege	60	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
Hall	40	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
In:							
Inavale	100	Not limited		Somewhat limited Depth to saturated zone	0.16	Not limited	
KCB:							
Kenesaw	60	Not limited		Not limited		Somewhat limited Slope	0.00
Coly	40	Not limited		Not limited		Somewhat limited Slope	0.00
Ks:							
Kenesaw	100	Not limited		Not limited		Not limited	
KsA:							
Kenesaw	100	Not limited		Not limited		Not limited	
KsB:							
Kenesaw	100	Not limited		Not limited		Somewhat limited Slope	0.00
Lex:							
Lex	100	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
Lf:							
Leshara	100	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39

BUILDING SITE DEVELOPMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LG:							
Gibbon	50	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	1.00	Shrink-swell	0.50
		Depth to saturated zone	0.39			Depth to saturated zone	0.39
Leshara	50	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.39	Depth to saturated zone	1.00	Depth to saturated zone	0.39
Lm:							
Loup	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Lx:							
Gothenburg	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
M:							
Fluvaquents	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
M-W:							
Miscellaneous Water-	100	Not rated		Not rated		Not rated	
OrC:							
Anselmo	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.00	Slope	0.00	Slope	1.00
P:							
Platte	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	1.00	Depth to saturated zone	0.39
PL:							
Platte	60	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	1.00	Depth to saturated zone	0.39
Alda	40	Not limited		Very limited		Not limited	
				Depth to saturated zone	1.00		
RB:							
Coly	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Ru:							
Rusco	100	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Rw:							
Riverwash	100	Not rated		Not rated		Not rated	
Sc:							
Scott	100	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
SdA:							
Simeon	100	Not limited		Not limited		Not limited	
Slc:							
Silver Creek	100	Very limited		Somewhat limited		Very limited	
		Shrink-swell	1.00	Depth to saturated zone	0.95	Shrink-swell	1.00
Sx:							
Bolent	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.95		
TsA:							
Dunday	100	Not limited		Not limited		Not limited	
TXA:							
Dunday	60	Not limited		Not limited		Not limited	
Valentine	40	Not limited		Not limited		Not limited	

BUILDING SITE DEVELOPMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
TXB:							
Dunday	60	Not limited		Not limited		Somewhat limited	
						Slope	0.00
Valentine	40	Not limited		Not limited		Somewhat limited	
						Slope	0.00
TYA:							
Dunday	60	Not limited		Not limited		Not limited	
Valentine	40	Not limited		Not limited		Not limited	
UHC:							
Holdrege	50	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.00	Slope	0.00	Shrink-swell	0.50
Uly	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.00	Slope	0.00	Slope	1.00
UHC2:							
Uly	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.00	Slope	0.00	Slope	1.00
Coly	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.00	Slope	0.00	Slope	1.00
Holdrege	30	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.00	Slope	0.00	Shrink-swell	0.50
UsD:							
Uly	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Slope	1.00
VbC:							
Valentine	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
W:							
Water	100	Not rated		Not rated		Not rated	
Wb:							
Wann	100	Not limited		Somewhat limited		Not limited	
				Depth to saturated zone	0.95		
Wm:							
Wann	100	Not limited		Somewhat limited		Not limited	
				Depth to saturated zone	0.95		
Wr:							
Wood River	100	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
WrA:							
Wood River	100	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
WS:							
Wood River	70	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
Gayville Variant	30	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Shrink-swell	0.50	Depth to saturated zone	0.95	Shrink-swell	0.50
Wx:							
Barney	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

BUILDING SITE DEVELOPMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2Gg:							
Gibbon	100	Very limited		Very limited		Very limited	
		Frost action	1.00	Depth to saturated zone	1.00	Salinity	1.00
		Low strength	1.00	Cutbanks cave	0.10	Depth to saturated zone	0.19
		Shrink-swell	0.50				
		Depth to saturated zone	0.19				
2Hb:							
Hobbs	100	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Flooding	0.60	Flooding	0.60
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
2Kt:							
Cozad	100	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
2Or:							
Anselmo	100	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
2OrB2:							
Anselmo	100	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
2Sc:							
Scott	100	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Too clayey	0.28		
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	1.00				
2TXA:							
Dunday	60	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.12
Valentine	40	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.07
AED:							
Arents, Earthen Dam-	100	Not rated		Not rated		Not rated	
Ax:							
Alda	100	Very limited		Very limited		Not limited	
		Frost action	1.00	Cutbanks cave	1.00		
				Depth to saturated zone	1.00		
Ay:							
Alda	100	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	1.00	Depth to saturated zone	0.19
		Depth to saturated zone	0.19	Depth to saturated zone	1.00		
Bdn:							
Blendon	100	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
BdnA:							
Anselmo	100	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Bed:							
Blendon	100	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
BedA:							
Anselmo	100	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Bob:							
Boel	100	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
		Frost action	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.19
		Depth to saturated zone	0.19	Flooding	0.60		
Boc:							
Boel	100	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
		Frost action	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.19
		Depth to saturated zone	0.19	Flooding	0.60		

BUILDING SITE DEVELOPMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
By:							
Coly	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	0.78	Cutbanks cave	0.10		
		Frost action	0.50				
Hobbs	50	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.80	Flooding	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
CbC:							
Coly	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Low strength	0.78	Cutbanks cave	0.10	Slope	0.00
		Frost action	0.50	Slope	0.00		
		Slope	0.00				
CbE:							
Coly	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	0.78	Cutbanks cave	0.10		
		Frost action	0.50				
Cm:							
Cass	100	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Coz:							
Cozad	100	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
CozA:							
Cozad	100	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
CozB2:							
Cozad	100	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
CozC2:							
Cozad	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	0.10	Slope	0.00
		Slope	0.00	Slope	0.00		
Cs:							
Cass	100	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
CYE:							
Coly	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	0.78	Cutbanks cave	0.10		
		Frost action	0.50				
Gg:							
Gibbon	100	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	1.00	Depth to saturated zone	0.19
		Low strength	1.00	Depth to saturated zone	1.00		
		Depth to saturated zone	0.19				
Gk:							
Grigston	100	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
				Depth to dense layer	0.50		
GP:							
Pits	100	Not rated		Not rated		Not rated	
Ha:							
Hall	100	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
HaA:							
Hall	100	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
Hb:							
Hord	100	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				

BUILDING SITE DEVELOPMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
HbA:							
Hord	100	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
HbB:							
Hord	100	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
Hd:							
Hord	100	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
HdA:							
Hord	100	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
HoA:							
Holdrege	100	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
HoB:							
Holdrege	100	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
HoB2:							
Holdrege	100	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
HQ:							
Holdrege	60	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
Hall	40	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
In:							
Inavale	100	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.00
				Depth to saturated zone	0.16		
KCB:							
Kenesaw	60	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
Coly	40	Somewhat limited		Somewhat limited		Not limited	
		Low strength	0.78	Cutbanks cave	0.10		
		Frost action	0.50				
Ks:							
Kenesaw	100	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
KsA:							
Kenesaw	100	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
KsB:							
Kenesaw	100	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
Lex:							
Lex	100	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	1.00	Depth to saturated zone	0.19
		Depth to saturated zone	0.19	Depth to saturated zone	1.00		
Lf:							
Leshara	100	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	1.00	Depth to saturated zone	0.19
		Depth to saturated zone	0.19	Depth to saturated zone	1.00		
				Depth to dense layer	0.50		

BUILDING SITE DEVELOPMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LG:							
Gibbon	50	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.19
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Depth to saturated zone	0.19				
Leshara	50	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	1.00	Depth to saturated zone	0.19
		Depth to saturated zone	0.19	Depth to saturated zone	1.00		
				Depth to dense layer	0.50		
Lm:							
Loup	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Depth to saturated zone	1.00		
Lx:							
Gothenburg	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Cutbanks cave	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Flooding	0.80	Droughty	0.42
M:							
Fluvaquents	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Cutbanks cave	1.00	Droughty	0.69
		Frost action	0.50	Flooding	0.60	Flooding	0.60
M-W:							
Miscellaneous Water-	100	Not rated		Not rated		Not rated	
OrC:							
Anselmo	100	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Slope	0.00
		Slope	0.00	Slope	0.00		
P:							
Platte	100	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
		Frost action	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.19
		Depth to saturated zone	0.19	Flooding	0.60	Droughty	0.09
				Depth to dense layer	0.50		
PL:							
Platte	60	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
		Frost action	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.19
		Depth to saturated zone	0.19	Flooding	0.60	Droughty	0.09
				Depth to dense layer	0.50		
Alda	40	Very limited		Very limited		Not limited	
		Frost action	1.00	Cutbanks cave	1.00		
				Depth to saturated zone	1.00		
RB:							
Coly	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	0.78	Cutbanks cave	0.10		
		Frost action	0.50				
Ru:							
Rusco	100	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	0.22				

BUILDING SITE DEVELOPMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Rw:							
Riverwash	100	Not rated		Not rated		Not rated	
Sc:							
Scott	100	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Too clayey	0.28		
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	1.00				
SdA:							
Simeon	100	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.04
Slc:							
Silver Creek	100	Very limited		Very limited		Not limited	
		Frost action	1.00	Cutbanks cave	1.00		
		Low strength	1.00	Depth to saturated zone	0.95		
		Shrink-swell	1.00	Too clayey	0.01		
Sx:							
Bolent	100	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
		Frost action	0.50	Depth to saturated zone	0.95	Droughty	0.34
				Flooding	0.60		
TsA:							
Dunday	100	Not limited		Very limited		Not limited	
				Cutbanks cave	1.00		
TXA:							
Dunday	60	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.00
Valentine	40	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.79
TXB:							
Dunday	60	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.00
Valentine	40	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.79
TYA:							
Dunday	60	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.00
Valentine	40	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.79
UHC:							
Holdrege	50	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	0.10	Slope	0.00
		Shrink-swell	0.50	Slope	0.00		
		Frost action	0.50				
		Slope	0.00				
Uly	50	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	0.10	Slope	0.00
		Frost action	0.50	Slope	0.00		
		Slope	0.00				
UHC2:							
Uly	40	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	0.10	Slope	0.00
		Frost action	0.50	Slope	0.00		
		Slope	0.00				
Coly	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Low strength	0.78	Cutbanks cave	0.10	Slope	0.00
		Frost action	0.50	Slope	0.00		
		Slope	0.00				
Holdrege	30	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	0.10	Slope	0.00
		Shrink-swell	0.50	Slope	0.00		
		Frost action	0.50				
		Slope	0.00				
UsD:							
Uly	100	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.84	Slope	0.84
		Slope	0.84	Cutbanks cave	0.10		
		Frost action	0.50				

BUILDING SITE DEVELOPMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
VbC:							
Valentine	100	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.16	Cutbanks cave	1.00	Droughty	0.79
				Slope	0.16	Slope	0.16
W:							
Water	100	Not rated		Not rated		Not rated	
Wb:							
Wann	100	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Depth to saturated zone	0.95		
				Cutbanks cave	0.10		
Wm:							
Wann	100	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Depth to saturated zone	0.95		
				Cutbanks cave	0.10		
Wr:							
Wood River	100	Very limited		Somewhat limited		Very limited	
		Low strength	1.00	Cutbanks cave	0.10	Sodium content	1.00
		Shrink-swell	1.00				
WrA:							
Wood River	100	Very limited		Somewhat limited		Very limited	
		Low strength	1.00	Cutbanks cave	0.10	Sodium content	1.00
		Shrink-swell	1.00				
WS:							
Wood River	70	Very limited		Somewhat limited		Very limited	
		Low strength	1.00	Cutbanks cave	0.10	Sodium content	1.00
		Shrink-swell	1.00				
Gayville Variant	30	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.95		
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				
		Flooding	0.40				
Wx:							
Barney	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Cutbanks cave	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Flooding	0.80	Droughty	0.95

CONSTRUCTION MATERIALS
Buffalo County, Nebraska

Construction Materials

These tables give information about the soils as potential sources of gravel, sand, topsoil, reclamation material, and roadfill. Normal compaction, minor processing, and other standard construction practices are assumed.

The soils are rated good, fair, or poor as potential sources of topsoil, reclamation material, and roadfill. The features that limit the soils as sources of these materials are specified in the tables. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of topsoil, reclamation material, or roadfill. The lower the number, the greater the limitation.

The soils are rated as a probable or improbable source of sand and gravel. A rating of probable means that the source material is likely to be in or below the soil. The numerical ratings in these columns indicate the degree of probability. The number 0.00 indicates that the soil is an improbable source. A number between 0.00 and 1.00 indicates the degree to which the soil is a probable source of sand or gravel.

Sand and gravel are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In the first table, only the probability of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the lowest layer of the soil contains sand or gravel, the soil is rated as a probable source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

CONSTRUCTION MATERIALS--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The ratings given for the thickest layer are for the thickest layer above and excluding the bottom layer. The numbers in the value columns range from 0.00 to 0.99. The greater the value, the greater the likelihood that the bottom layer or thickest layer of the soil is a source of sand or gravel. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
2Gg:					
Gibbon	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2Hb:					
Hobbs	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2Kt:					
Cozad	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
2Or:					
Anselmo	100	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.63
2OrB2:					
Anselmo	100	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.63
2Sc:					
Scott	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2TXA:					
Dunday	60	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.65
		Thickest layer	0.00		
Valentine	40	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.66
		Thickest layer	0.00		
AED:					
Arents, Earthen Dam	100	Not rated		Not rated	
Ax:					
Alda	100	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00		
Ay:					
Alda	100	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00		
Bdn:					
Blendon	100	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00		
BdnA:					
Anselmo	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.57
Bed:					
Blendon	100	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00		
BedA:					
Anselmo	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.57
Bob:					
Boel	100	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00		

CONSTRUCTION MATERIALS--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Boc:					
Boel	100	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00		
By:					
Coly	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hobbs	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
CbC:					
Coly	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
CbE:					
Coly	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Cm:					
Cass	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.99
Coz:					
Cozad	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
CozA:					
Cozad	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
CozB2:					
Cozad	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
CozC2:					
Cozad	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Cs:					
Cass	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.08
		Thickest layer	0.00	Bottom layer	0.99
CYE:					
Coly	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Gg:					
Gibbon	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.96
Gk:					
Grigston	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.98
GP:					
Pits	100	Not rated		Not rated	
Ha:					
Hall	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

CONSTRUCTION MATERIALS--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
HaA:					
Hall	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hb:					
Hord	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
HbA:					
Hord	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
HbB:					
Hord	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hd:					
Hord	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
HdA:					
Hord	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
HoA:					
Holdrege	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
HoB:					
Holdrege	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
HoB2:					
Holdrege	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
HQ:					
Holdrege	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hall	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
In:					
Inavale	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.07
		Thickest layer	0.00	Bottom layer	0.69
KCB:					
Kenesaw	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Coly	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Ks:					
Kenesaw	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
KsA:					
Kenesaw	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

CONSTRUCTION MATERIALS--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
KsB:					
Kenesaw	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Lex:					
Lex	100	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00		
Lf:					
Leshara	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.98
LG:					
Gibbon	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Leshara	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.98
Lm:					
Loup	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.19
		Thickest layer	0.00	Bottom layer	0.50
Lx:					
Gothenburg	100	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00		
M:					
Fluvaquents	100	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.19
		Thickest layer	0.00	Thickest layer	0.19
M-W:					
Miscellaneous Water-	100	Not rated		Not rated	
OrC:					
Anselmo	100	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.69
P:					
Platte	100	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.07
		Thickest layer	0.00		
PL:					
Platte	60	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.07
		Thickest layer	0.00		
Alda	40	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00		
RB:					
Coly	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Ru:					
Rusco	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rw:					
Riverwash	100	Not rated		Not rated	

CONSTRUCTION MATERIALS--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Sc:					
Scott	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
SdA:					
Simeon	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.10
		Thickest layer	0.00	Bottom layer	0.98
Slc:					
Silver Creek	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.49
Sx:					
Bolent	100	Poor		Good	
		Bottom layer	0.00	Bottom layer	0.92
		Thickest layer	0.00		
TsA:					
Dunday	100	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.07
		Thickest layer	0.00		
TXA:					
Dunday	60	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.65
		Thickest layer	0.00		
Valentine	40	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.70
		Thickest layer	0.00		
TXB:					
Dunday	60	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.65
		Thickest layer	0.00		
Valentine	40	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.70
		Thickest layer	0.00		
TYA:					
Dunday	60	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.65
		Thickest layer	0.00		
Valentine	40	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.70
		Thickest layer	0.00		
UHC:					
Holdrege	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Uly	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
UHC2:					
Uly	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Coly	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Holdrege	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
UsD:					
Uly	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

CONSTRUCTION MATERIALS--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
VbC:					
Valentine	100	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.70
		Thickest layer	0.00		
W:					
Water	100	Not rated		Not rated	
Wb:					
Wann	100	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.07
		Thickest layer	0.00	Thickest layer	0.08
Wm:					
Wann	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.07
Wr:					
Wood River	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
WrA:					
Wood River	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
WS:					
Wood River	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Gayville Variant	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Wx:					
Barney	100	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00		

CONSTRUCTION MATERIALS--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2Gg:							
Gibbon	100	Fair		Poor		Fair	
		Salinity	0.88	Low strength	0.00	Salinity	0.50
		Low content of organic matter	0.88	Depth to saturated zone	0.53	Depth to saturated zone	0.53
		Water erosion	0.90	Shrink-swell	0.87	Sodium content	0.98
		Sodium content	0.97				
2Hb:							
Hobbs	100	Fair		Poor		Good	
		Low content of organic matter	0.88	Low strength	0.00		
2Kt:							
Cozad	100	Fair		Good		Good	
		Low content of organic matter	0.88				
		Water erosion	0.99				
2Or:							
Anselmo	100	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Low content of organic matter	0.12				
2OrB2:							
Anselmo	100	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Low content of organic matter	0.12				
2Sc:							
Scott	100	Poor		Poor		Poor	
		Too clayey	0.00	Depth to saturated zone	0.00	Too Clayey	0.00
		Too acid	0.84	Low strength	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Shrink-swell	0.21		
2TXA:							
Dunday	60	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00				
		Low content of organic matter	0.12				
		Droughty	0.86				
Valentine	40	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00				
		Low content of organic matter	0.12				
		Droughty	0.74				
AED:							
Arents, Earthen Dam-	100	Not rated		Not rated		Not rated	
Ax:							
Alda	100	Fair		Fair		Fair	
		Low content of organic matter	0.12	Depth to saturated zone	0.89	Depth to saturated zone	0.89
		Sodium content	0.97			Sodium content	0.98
		Droughty	0.99				
Ay:							
Alda	100	Fair		Fair		Fair	
		Low content of organic matter	0.12	Depth to saturated zone	0.53	Depth to saturated zone	0.53
		Sodium content	0.97			Sodium content	0.98
Bdn:							
Blendon	100	Fair		Good		Good	
		Low content of organic matter	0.12				
BdnA:							
Anselmo	100	Fair		Good		Good	
		Low content of organic matter	0.12				

CONSTRUCTION MATERIALS--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Bed:							
Blendon	100	Fair		Good		Good	
		Low content of organic matter	0.12				
BedA:							
Anselmo	100	Fair		Good		Good	
		Low content of organic matter	0.12				
Bob:							
Boel	100	Poor		Fair		Poor	
		Too sandy	0.00	Depth to saturated zone	0.53	Too sandy	0.00
		Low content of organic matter	0.12			Depth to saturated zone	0.53
Boc:							
Boel	100	Poor		Fair		Poor	
		Too sandy	0.00	Depth to saturated zone	0.53	Too sandy	0.00
		Low content of organic matter	0.12			Depth to saturated zone	0.53
By:							
Coly	50	Fair		Fair		Poor	
		Low content of organic matter	0.88	Low strength	0.22	Slope	0.00
		Water erosion	0.90	Slope	0.92		
Hobbs	50	Fair		Poor		Good	
		Low content of organic matter	0.88	Low strength	0.00		
		Water erosion	0.90				
CbC:							
Coly	100	Fair		Fair		Good	
		Low content of organic matter	0.88	Low strength	0.22		
		Water erosion	0.90				
CbE:							
Coly	100	Fair		Fair		Poor	
		Low content of organic matter	0.88	Low strength	0.22	Slope	0.00
		Water erosion	0.90	Slope	0.32		
Cm:							
Cass	100	Fair		Good		Good	
		Low content of organic matter	0.12				
Coz:							
Cozad	100	Fair		Good		Good	
		Low content of organic matter	0.88				
		Water erosion	0.90				
CozA:							
Cozad	100	Fair		Good		Good	
		Low content of organic matter	0.88				
		Water erosion	0.90				
CozB2:							
Cozad	100	Fair		Good		Good	
		Low content of organic matter	0.12				
		Water erosion	0.90				
CozC2:							
Cozad	100	Fair		Good		Good	
		Low content of organic matter	0.88				
		Water erosion	0.90				
Cs:							
Cass	100	Fair		Good		Good	
		Low content of organic matter	0.12				

CONSTRUCTION MATERIALS--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CYE:							
Coly	60	Fair		Fair		Poor	
		Low content of organic matter	0.88	Slope	0.08	Slope	0.00
		Water erosion	0.90	Low strength	0.22		
Gg:							
Gibbon	100	Fair		Fair		Fair	
		Low content of organic matter	0.12	Depth to saturated zone	0.53	Depth to saturated zone	0.53
Gk:							
Grigston	100	Fair		Good		Good	
		Low content of organic matter	0.88				
		Water erosion	0.90				
GP:							
Pits	100	Not rated		Not rated		Not rated	
Ha:							
Hall	100	Fair		Poor		Good	
		Low content of organic matter	0.88	Low strength	0.00		
		Water erosion	0.90				
HaA:							
Hall	100	Fair		Poor		Good	
		Low content of organic matter	0.88	Low strength	0.00		
		Water erosion	0.90				
Hb:							
Hord	100	Fair		Poor		Good	
		Water erosion	0.90	Low strength	0.00		
HbA:							
Hord	100	Fair		Poor		Good	
		Water erosion	0.90	Low strength	0.00		
HbB:							
Hord	100	Fair		Poor		Good	
		Water erosion	0.90	Low strength	0.00		
Hd:							
Hord	100	Fair		Poor		Good	
		Low content of organic matter	0.88	Low strength	0.00		
		Water erosion	0.90				
HdA:							
Hord	100	Fair		Poor		Good	
		Low content of organic matter	0.88	Low strength	0.00		
		Water erosion	0.90				
HoA:							
Holdrege	100	Fair		Poor		Good	
		Low content of organic matter	0.12	Low strength	0.00		
		Water erosion	0.90	Shrink-swell	0.87		
HoB:							
Holdrege	100	Fair		Poor		Good	
		Low content of organic matter	0.12	Low strength	0.00		
		Water erosion	0.90	Shrink-swell	0.87		
HoB2:							
Holdrege	100	Fair		Poor		Good	
		Low content of organic matter	0.12	Low strength	0.00		
		Water erosion	0.90	Shrink-swell	0.87		
HQ:							
Holdrege	60	Fair		Poor		Good	
		Low content of organic matter	0.12	Low strength	0.00		
		Water erosion	0.90	Shrink-swell	0.87		

CONSTRUCTION MATERIALS--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Hall	40	Fair		Poor		Good	
		Low content of organic matter	0.88	Low strength	0.00		
		Water erosion	0.90	Shrink-swell	0.87		
In:							
Inavale	100	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Low content of organic matter	0.12				
		Droughty	0.98				
KCB:							
Kenesaw	60	Fair		Good		Good	
		Low content of organic matter	0.12				
		Water erosion	0.90				
Coly	40	Fair		Fair		Good	
		Low content of organic matter	0.88	Low strength	0.22		
		Water erosion	0.90				
Ks:							
Kenesaw	100	Fair		Good		Good	
		Low content of organic matter	0.12				
		Water erosion	0.90				
KsA:							
Kenesaw	100	Fair		Good		Good	
		Low content of organic matter	0.12				
		Water erosion	0.90				
KsB:							
Kenesaw	100	Fair		Good		Good	
		Low content of organic matter	0.12				
		Water erosion	0.90				
Lex:							
Lex	100	Poor		Fair		Poor	
		Too sandy	0.00	Depth to saturated zone	0.53	Too sandy	0.00
		Low content of organic matter	0.12			Rock fragments	0.03
		Water erosion	0.99			Depth to saturated zone	0.53
						Hard to reclaim	0.98
Lf:							
Leshara	100	Fair		Fair		Fair	
		Low content of organic matter	0.88	Depth to saturated zone	0.53	Depth to saturated zone	0.53
		Water erosion	0.90				
LG:							
Gibbon	50	Fair		Fair		Fair	
		Low content of organic matter	0.88	Depth to saturated zone	0.53	Depth to saturated zone	0.53
Leshara	50	Fair		Fair		Fair	
		Low content of organic matter	0.88	Depth to saturated zone	0.53	Depth to saturated zone	0.53
		Water erosion	0.90				
Lm:							
Loup	100	Poor		Poor		Poor	
		Too sandy	0.00	Depth to saturated zone	0.00	Too sandy	0.00
		Low content of organic matter	0.12			Depth to saturated zone	0.00

CONSTRUCTION MATERIALS--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Lx:							
Gothenburg----------	100	Poor		Poor		Poor	
		Too sandy	0.00	Depth to saturated zone	0.00	Too sandy	0.00
		Low content of organic matter	0.12			Depth to saturated zone	0.00
		Droughty	0.40			Rock fragments	0.03
						Hard to reclaim	0.98
M:							
Fluvaquents---------	100	Fair		Poor		Poor	
		Too sandy	0.32	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Droughty	0.35			Too sandy	0.32
		Low content of organic matter	0.88				
M-W:							
Miscellaneous Water-	100	Not rated		Not rated		Not rated	
OrC:							
Anselmo-------------	100	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Low content of organic matter	0.12				
P:							
Platte--------------	100	Poor		Fair		Poor	
		Too sandy	0.00	Depth to saturated zone	0.53	Hard to reclaim	0.00
		Low content of organic matter	0.12			Too sandy	0.00
		Droughty	0.34			Rock fragments	0.03
						Depth to saturated zone	0.53
						Hard to reclaim	0.98
PL:							
Platte--------------	60	Poor		Fair		Poor	
		Too sandy	0.00	Depth to saturated zone	0.53	Hard to reclaim	0.00
		Low content of organic matter	0.12			Too sandy	0.00
		Droughty	0.34			Rock fragments	0.03
						Depth to saturated zone	0.53
						Hard to reclaim	0.98
Alda----------------	40	Fair		Fair		Fair	
		Low content of organic matter	0.12	Depth to saturated zone	0.89	Depth to saturated zone	0.89
		Droughty	0.90			Sodium content	0.98
		Sodium content	0.97				
RB:							
Coly----------------	100	Fair		Poor		Poor	
		Low content of organic matter	0.88	Slope	0.00	Slope	0.00
		Water erosion	0.90	Low strength	0.22		
Ru:							
Rusco---------------	100	Fair		Poor		Poor	
		Low content of organic matter	0.88	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.90	Low strength	0.78		
Rw:							
Riverwash-----------	100	Not rated		Not rated		Not rated	
Sc:							
Scott---------------	100	Poor		Poor		Poor	
		Too clayey	0.00	Depth to saturated zone	0.00	Too Clayey	0.00
		Too acid	0.84	Low strength	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Shrink-swell	0.21		

CONSTRUCTION MATERIALS--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
SdA:							
Simeon	100	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Low content of organic matter	0.12				
		Droughty	0.92				
Slc:							
Silver Creek	100	Poor		Fair		Poor	
		Too clayey	0.00	Shrink-swell	0.91	Too Clayey	0.00
		Low content of organic matter	0.12			Salinity	0.88
		Water erosion	0.90				
Sx:							
Bolent	100	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00				
		Low content of organic matter	0.12				
		Droughty	0.71				
TsA:							
Dunday	100	Fair		Good		Good	
		Low content of organic matter	0.12				
TXA:							
Dunday	60	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00				
		Low content of organic matter	0.12				
		Droughty	0.97				
Valentine	40	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00				
		Low content of organic matter	0.12				
		Droughty	0.18				
TXB:							
Dunday	60	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00				
		Low content of organic matter	0.12				
		Droughty	0.97				
Valentine	40	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00				
		Low content of organic matter	0.12				
		Droughty	0.18				
TYA:							
Dunday	60	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00				
		Low content of organic matter	0.12				
		Droughty	0.97				
Valentine	40	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00				
		Low content of organic matter	0.12				
		Droughty	0.18				
UHC:							
Holdrege	50	Fair		Poor		Good	
		Low content of organic matter	0.12	Low strength	0.00		
		Water erosion	0.90	Shrink-swell	0.87		

CONSTRUCTION MATERIALS--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Uly	50	Fair		Poor		Good	
		Low content of organic matter	0.12	Low strength	0.00		
		Water erosion	0.90				
UHC2:							
Uly	40	Fair		Poor		Good	
		Low content of organic matter	0.12	Low strength	0.00		
		Water erosion	0.90				
Coly	30	Fair		Fair		Good	
		Low content of organic matter	0.88	Low strength	0.22		
		Water erosion	0.90				
Holdrege	30	Fair		Poor		Fair	
		Low content of organic matter	0.12	Low strength	0.00	Too Clayey	0.79
		Water erosion	0.90	Shrink-swell	0.87		
		Too clayey	0.95				
UsD:							
Uly	100	Fair		Poor		Fair	
		Low content of organic matter	0.12	Low strength	0.00	Slope	0.16
		Water erosion	0.90				
VbC:							
Valentine	100	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Slope	0.84
		Low content of organic matter	0.12				
		Droughty	0.18				
W:							
Water	100	Not rated		Not rated		Not rated	
Wb:							
Wann	100	Fair		Good		Fair	
		Low content of organic matter	0.88			Rock fragments	0.97
		Sodium content	0.97			Sodium content	0.98
Wm:							
Wann	100	Fair		Good		Fair	
		Low content of organic matter	0.88			Rock fragments	0.97
		Sodium content	0.97			Sodium content	0.98
Wr:							
Wood River	100	Poor		Poor		Poor	
		Sodium content	0.00	Low strength	0.00	Too Clayey	0.00
		Too clayey	0.00	Shrink-swell	0.52	Sodium content	0.00
		Low content of organic matter	0.88				
		Water erosion	0.90				
WrA:							
Wood River	100	Poor		Poor		Poor	
		Sodium content	0.00	Low strength	0.00	Too Clayey	0.00
		Too clayey	0.00	Shrink-swell	0.52	Sodium content	0.00
		Low content of organic matter	0.88				
		Water erosion	0.90				
WS:							
Wood River	70	Poor		Poor		Poor	
		Sodium content	0.00	Low strength	0.00	Sodium content	0.00
		Too clayey	0.00	Shrink-swell	0.52	Too Clayey	0.00
		Low content of organic matter	0.88			Salinity	0.50
		Water erosion	0.90				

CONSTRUCTION MATERIALS--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Gayville Variant----	30	Poor		Fair		Fair	
		Too alkaline	0.00	Low strength	0.22	Sodium content	0.98
		Sodium content	0.03				
		Low content of organic matter	0.12				
		Water erosion	0.90				
Wx:							
Barney----------	100	Poor		Poor		Poor	
		Too sandy	0.00	Depth to saturated zone	0.00	Hard to reclaim	0.00
		Droughty	0.00			Too sandy	0.00
		Low content of organic matter	0.12			Depth to saturated zone	0.00
						Rock fragments	0.03
						Hard to reclaim	0.98

RECREATIONAL INTERPRETATIONS
Buffalo County, Nebraska

Recreation

The soils of the survey area are rated in the following tables according to limitations that affect their suitability for recreation. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. Not limited indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. Slightly limited indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. Somewhat limited indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. Very limited indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in this table can be supplemented by other information in this survey, for example, interpretations for building site development, construction materials, sanitary facilities, and water management.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas.

The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

RECREATIONAL INTERPRETATIONS--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2Gg:							
Gibbon	100	Very limited		Very limited		Very limited	
		Salinity	1.00	Salinity	1.00	Salinity	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	0.19	Depth to saturated zone	0.39
2Hb:							
Hobbs	100	Very limited		Not limited		Somewhat limited	
		Flooding	1.00			Flooding	0.60
						Slope	0.00
2Kt:							
Cozad	100	Not limited		Not limited		Not limited	
2Or:							
Anselmo	100	Not limited		Not limited		Somewhat limited	
						Slope	0.00
2OrB2:							
Anselmo	100	Not limited		Not limited		Somewhat limited	
						Slope	0.50
2Sc:							
Scott	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
2TXA:							
Dunday	60	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.95	Too sandy	0.95	Too sandy	0.95
						Slope	0.00
Valentine	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.96	Too sandy	0.96	Too sandy	0.96
						Slope	0.00
AED:							
Arents, Earthen Dam-	100	Not rated		Not rated		Not rated	
Ax:							
Alda	100	Not limited		Not limited		Not limited	
Ay:							
Alda	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.39	Depth to saturated zone	0.19	Depth to saturated zone	0.39
Bdn:							
Blendon	100	Not limited		Not limited		Not limited	
BdnA:							
Anselmo	100	Not limited		Not limited		Somewhat limited	
						Slope	0.00
Bed:							
Blendon	100	Not limited		Not limited		Not limited	
BedA:							
Anselmo	100	Not limited		Not limited		Somewhat limited	
						Slope	0.00
Bob:							
Boel	100	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Depth to saturated zone	0.19	Flooding	0.60
		Depth to saturated zone	0.39			Depth to saturated zone	0.39
						Slope	0.00
Boc:							
Boel	100	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Depth to saturated zone	0.19	Flooding	0.60
		Depth to saturated zone	0.39			Depth to saturated zone	0.39
						Slope	0.00
By:							
Coly	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Hobbs	50	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.40	Flooding	1.00
						Slope	0.00
CbC:							
Coly	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.00	Slope	0.00	Slope	1.00
CbE:							
Coly	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Cm:							
Cass	100	Not limited		Not limited		Not limited	
Coz:							
Cozad	100	Not limited		Not limited		Not limited	

RECREATIONAL INTERPRETATIONS--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CozA:							
Cozad	100	Not limited		Not limited		Somewhat limited Slope	0.00
CozB2:							
Cozad	100	Not limited		Not limited		Somewhat limited Slope	0.50
CozC2:							
Cozad	100	Somewhat limited Slope	0.00	Somewhat limited Slope	0.00	Very limited Slope	1.00
Cs:							
Cass	100	Not limited		Not limited		Somewhat limited Slope	0.00
CYE:							
Coly	60	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Gg:							
Gibbon	100	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Depth to saturated zone	0.39
Gk:							
Grigston	100	Not limited		Not limited		Not limited	
GP:							
Pits	100	Not rated		Not rated		Not rated	
Ha:							
Hall	100	Not limited		Not limited		Not limited	
HaA:							
Hall	100	Not limited		Not limited		Somewhat limited Slope	0.00
Hb:							
Hord	100	Not limited		Not limited		Not limited	
HbA:							
Hord	100	Not limited		Not limited		Somewhat limited Slope	0.00
HbB:							
Hord	100	Not limited		Not limited		Somewhat limited Slope	0.50
Hd:							
Hord	100	Not limited		Not limited		Not limited	
HdA:							
Hord	100	Not limited		Not limited		Somewhat limited Slope	0.00
HoA:							
Holdrege	100	Not limited		Not limited		Somewhat limited Slope	0.00
HoB:							
Holdrege	100	Not limited		Not limited		Somewhat limited Slope	0.50
HoB2:							
Holdrege	100	Not limited		Not limited		Somewhat limited Slope	0.50
HQ:							
Holdrege	60	Not limited		Not limited		Not limited	
Hall	40	Not limited		Not limited		Not limited	
In:							
Inavale	100	Not limited		Not limited		Somewhat limited Slope	0.00
KCB:							
Kenesaw	60	Not limited		Not limited		Somewhat limited Slope	0.50
Coly	40	Not limited		Not limited		Somewhat limited Slope	0.50
Ks:							
Kenesaw	100	Not limited		Not limited		Not limited	
KsA:							
Kenesaw	100	Not limited		Not limited		Somewhat limited Slope	0.00
KsB:							
Kenesaw	100	Not limited		Not limited		Somewhat limited Slope	0.50
Lex:							
Lex	100	Somewhat limited Depth to saturated zone Restricted permeability	0.39 0.21	Somewhat limited Restricted permeability Depth to saturated zone	0.21 0.19	Somewhat limited Depth to saturated zone Restricted permeability	0.39 0.21
Lf:							
Leshara	100	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Depth to saturated zone	0.39

RECREATIONAL INTERPRETATIONS--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LG:							
Gibbon	50	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Depth to saturated zone	0.39
Leshara	50	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Depth to saturated zone	0.39
Lm:							
Loup	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Lx:							
Gothenburg	100	Very limited Flooding	1.00	Very limited Depth to saturated zone	1.00	Very limited Flooding	1.00
		Depth to saturated zone	1.00	Flooding	0.40	Depth to saturated zone	1.00
						Slope	0.00
M:							
Fluvaquents	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Flooding	1.00	Too sandy	0.41	Flooding	0.60
		Too sandy	0.41			Too sandy	0.41
M-W:							
Miscellaneous Water-	100	Not rated		Not rated		Not rated	
OrC:							
Anselmo	100	Somewhat limited Slope	0.00	Somewhat limited Slope	0.00	Very limited Slope	1.00
P:							
Platte	100	Very limited Flooding	1.00	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Flooding	0.60
		Depth to saturated zone	0.39			Depth to saturated zone	0.39
						Slope	0.00
PL:							
Platte	60	Very limited Flooding	1.00	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Flooding	0.60
		Depth to saturated zone	0.39			Depth to saturated zone	0.39
						Slope	0.00
Alda	40	Not limited		Not limited		Somewhat limited Slope	0.00
RB:							
Coly	100	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Ru:							
Rusco	100	Very limited Depth to saturated zone	1.00	Very limited Ponding	1.00	Very limited Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Ponding	1.00
Rw:							
Riverwash	100	Not rated		Not rated		Not rated	
Sc:							
Scott	100	Very limited Depth to saturated zone	1.00	Very limited Ponding	1.00	Very limited Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
SdA:							
Simeon	100	Not limited		Not limited		Somewhat limited Slope	0.00
Slc:							
Silver Creek	100	Somewhat limited Restricted permeability	0.94	Somewhat limited Restricted permeability	0.94	Somewhat limited Restricted permeability	0.94
Sx:							
Bolent	100	Very limited Flooding	1.00	Very limited Too sandy	1.00	Very limited Too sandy	1.00
		Too sandy	1.00			Flooding	0.60
TsA:							
Dunday	100	Not limited		Not limited		Somewhat limited	

RECREATIONAL INTERPRETATIONS--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
						Slope	0.00
TXA:							
Dunday	60	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.95	Too sandy	0.95	Too sandy	0.95
						Slope	0.00
Valentine	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.96	Too sandy	0.96	Too sandy	0.96
						Slope	0.00
TXB:							
Dunday	60	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.95	Too sandy	0.95	Too sandy	0.95
						Slope	0.50
Valentine	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.96	Too sandy	0.96	Too sandy	0.96
						Slope	0.50
TYA:							
Dunday	60	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.95	Too sandy	0.95	Too sandy	0.95
						Slope	0.00
Valentine	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.96	Too sandy	0.96	Too sandy	0.96
						Slope	0.00
UHC:							
Holdrege	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.00	Slope	0.00	Slope	1.00
Uly	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.00	Slope	0.00	Slope	1.00
UHC2:							
Uly	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.00	Slope	0.00	Slope	1.00
Coly	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.00	Slope	0.00	Slope	1.00
Holdrege	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.00	Slope	0.00	Slope	1.00
UsD:							
Uly	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Slope	1.00
VbC:							
Valentine	100	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.96	Too sandy	0.96	Slope	1.00
		Slope	0.16	Slope	0.16	Too sandy	0.96
W:							
Water	100	Not rated		Not rated		Not rated	
Wb:							
Wann	100	Not limited		Not limited		Not limited	
Wm:							
Wann	100	Not limited		Not limited		Not limited	
Wr:							
Wood River	100	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	0.39	Restricted permeability	0.39	Restricted permeability	0.39
WrA:							
Wood River	100	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	0.39	Restricted permeability	0.39	Restricted permeability	0.39
						Slope	0.00
WS:							
Wood River	70	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	0.39	Restricted permeability	0.39	Restricted permeability	0.39
Gayville Variant	30	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Restricted permeability	0.39	Restricted permeability	0.39
		Restricted permeability	0.39				
Wx:							
Barney	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Flooding	0.40	Depth to saturated zone	1.00
		Restricted permeability	0.15	Restricted permeability	0.15	Restricted permeability	0.15

RECREATIONAL INTERPRETATIONS--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2Gg:					
Gibbon	100	Not limited		Very limited	
				Salinity	1.00
				Depth to saturated zone	0.19
2Hb:					
Hobbs	100	Not limited		Somewhat limited	
				Flooding	0.60
2Kt:					
Cozad	100	Not limited		Not limited	
2Or:					
Anselmo	100	Not limited		Not limited	
2OrB2:					
Anselmo	100	Not limited		Not limited	
2Sc:					
Scott	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
2TXA:					
Dunday	60	Somewhat limited		Somewhat limited	
		Too sandy	0.95	Droughty	0.12
Valentine	40	Somewhat limited		Somewhat limited	
		Too sandy	0.96	Droughty	0.07
AED:					
Arents, Earthen Dam-	100	Not rated		Not rated	
Ax:					
Alda	100	Not limited		Not limited	
Ay:					
Alda	100	Not limited		Somewhat limited	
				Depth to saturated zone	0.19
Bdn:					
Blendon	100	Not limited		Not limited	
BdnA:					
Anselmo	100	Not limited		Not limited	
Bed:					
Blendon	100	Not limited		Not limited	
BedA:					
Anselmo	100	Not limited		Not limited	
Bob:					
Boel	100	Not limited		Somewhat limited	
				Flooding	0.60
				Depth to saturated zone	0.19
Boc:					
Boel	100	Not limited		Somewhat limited	
				Flooding	0.60
				Depth to saturated zone	0.19
By:					
Coly	50	Somewhat limited		Very limited	
		Slope	0.08	Slope	1.00
Hobbs	50	Somewhat limited		Very limited	
		Flooding	0.40	Flooding	1.00
CbC:					
Coly	100	Not limited		Somewhat limited	
				Slope	0.00
CbE:					
Coly	100	Somewhat limited		Very limited	
		Slope	0.68	Slope	1.00
Cm:					
Cass	100	Not limited		Not limited	
Coz:					
Cozad	100	Not limited		Not limited	
CozA:					
Cozad	100	Not limited		Not limited	
CozB2:					
Cozad	100	Not limited		Not limited	
CozC2:					
Cozad	100	Not limited		Somewhat limited	
				Slope	0.00
Cs:					
Cass	100	Not limited		Not limited	
CYE:					
Coly	60	Somewhat limited		Very limited	
		Slope	0.92	Slope	1.00

RECREATIONAL INTERPRETATIONS--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Gg:					
Gibbon	100	Not limited		Somewhat limited Depth to saturated zone	0.19
Gk:					
Grigston	100	Not limited		Not limited	
GP:					
Pits	100	Not rated		Not rated	
Ha:					
Hall	100	Not limited		Not limited	
HaA:					
Hall	100	Not limited		Not limited	
Hb:					
Hord	100	Not limited		Not limited	
HbA:					
Hord	100	Not limited		Not limited	
HbB:					
Hord	100	Not limited		Not limited	
Hd:					
Hord	100	Not limited		Not limited	
HdA:					
Hord	100	Not limited		Not limited	
HoA:					
Holdrege	100	Not limited		Not limited	
HoB:					
Holdrege	100	Not limited		Not limited	
HoB2:					
Holdrege	100	Not limited		Not limited	
HQ:					
Holdrege	60	Not limited		Not limited	
Hall	40	Not limited		Not limited	
In:					
Inavale	100	Not limited		Somewhat limited Droughty	0.00
KCB:					
Kenesaw	60	Not limited		Not limited	
Coly	40	Not limited		Not limited	
Ks:					
Kenesaw	100	Not limited		Not limited	
KsA:					
Kenesaw	100	Not limited		Not limited	
KsB:					
Kenesaw	100	Not limited		Not limited	
Lex:					
Lex	100	Not limited		Somewhat limited Depth to saturated zone	0.19
Lf:					
Leshara	100	Not limited		Somewhat limited Depth to saturated zone	0.19
LG:					
Gibbon	50	Not limited		Somewhat limited Depth to saturated zone	0.19
Leshara	50	Not limited		Somewhat limited Depth to saturated zone	0.19
Lm:					
Loup	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Lx:					
Gothenburg	100	Very limited Depth to saturated zone Flooding	1.00 0.40	Very limited Flooding Depth to saturated zone Droughty	1.00 1.00 0.42
M:					
Fluvaquents	100	Very limited Depth to saturated zone Too sandy	1.00 0.41	Very limited Depth to saturated zone Droughty Flooding	1.00 0.69 0.60
M-W:					
Miscellaneous Water-	100	Not rated		Not rated	

RECREATIONAL INTERPRETATIONS--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
OrC:					
Anselmo	100	Not limited		Somewhat limited	
				Slope	0.00
P:					
Platte	100	Not limited		Somewhat limited	
				Flooding	0.60
				Depth to saturated zone	0.19
				Droughty	0.09
PL:					
Platte	60	Not limited		Somewhat limited	
				Flooding	0.60
				Depth to saturated zone	0.19
				Droughty	0.09
Alda	40	Not limited		Not limited	
RB:					
Coly	100	Very limited		Very limited	
		Slope	1.00	Slope	1.00
Ru:					
Rusco	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
Rw:					
Riverwash	100	Not rated		Not rated	
Sc:					
Scott	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
SdA:					
Simeon	100	Not limited		Somewhat limited	
				Droughty	0.04
Slc:					
Silver Creek	100	Not limited		Not limited	
Sx:					
Bolent	100	Very limited		Somewhat limited	
		Too sandy	1.00	Flooding	0.60
				Droughty	0.34
TsA:					
Dunday	100	Not limited		Not limited	
TXA:					
Dunday	60	Somewhat limited		Somewhat limited	
		Too sandy	0.95	Droughty	0.00
Valentine	40	Somewhat limited		Somewhat limited	
		Too sandy	0.96	Droughty	0.79
TXB:					
Dunday	60	Somewhat limited		Somewhat limited	
		Too sandy	0.95	Droughty	0.00
Valentine	40	Somewhat limited		Somewhat limited	
		Too sandy	0.96	Droughty	0.79
TYA:					
Dunday	60	Somewhat limited		Somewhat limited	
		Too sandy	0.95	Droughty	0.00
Valentine	40	Somewhat limited		Somewhat limited	
		Too sandy	0.96	Droughty	0.79
UHC:					
Holdrege	50	Not limited		Somewhat limited	
				Slope	0.00
Uly	50	Not limited		Somewhat limited	
				Slope	0.00
UHC2:					
Uly	40	Not limited		Somewhat limited	
				Slope	0.00
Coly	30	Not limited		Somewhat limited	
				Slope	0.00
Holdrege	30	Not limited		Somewhat limited	
				Slope	0.00
UsD:					
Uly	100	Not limited		Somewhat limited	
				Slope	0.84

RECREATIONAL INTERPRETATIONS--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
VbC:					
Valentine	100	Somewhat limited		Somewhat limited	
		Too sandy	0.96	Droughty	0.79
				Slope	0.16
W:					
Water	100	Not rated		Not rated	
Wb:					
Wann	100	Not limited		Not limited	
Wm:					
Wann	100	Not limited		Not limited	
Wr:					
Wood River	100	Not limited		Very limited	
				Sodium content	1.00
WrA:					
Wood River	100	Not limited		Very limited	
				Sodium content	1.00
WS:					
Wood River	70	Not limited		Very limited	
				Sodium content	1.00
Gayville Variant	30	Not limited		Not limited	
Wx:					
Barney	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Flooding	1.00
		Flooding	0.40	Depth to saturated zone	1.00
				Droughty	0.95

WILDLIFE INTERPRETATIONS
Buffalo County, Nebraska

Use and Explanation of Wildlife Interpretations

Soils directly affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the development of water impoundments. The kind and abundance of wildlife that populate an area depend largely on the amount and distribution of food, cover, water, and living space. If any one of these elements is missing, inadequate, or inaccessible, wildlife will be scarce or will not inhabit the area. If the soils have the potential, wildlife habitat can be created or improved by planting appropriate vegetation, properly managing the existing plant cover, and fostering the natural establishment of desirable plants.

In the Wildlife Interpretations table, the soils in the survey area are rated according to their potential for providing habitat for various kinds of wildlife. This information can be used in planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting soils that are suitable for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management needed for each element of the habitat.

Suitability Ratings

The potential of the soil is rated good, fair, poor, or very poor.

Good - means that the element of wildlife habitat or the kind of habitat is easily created, improved, or maintained. Few or no limitations affect management, and satisfactory results can be expected if the soil is used for the designated purpose.

Fair - means that the element of wildlife habitat or kind of habitat can be created, improved, or maintained in most places. Moderately intensive management is required for satisfactory results.

Poor - means that limitations are severe for the designated element or kind of wildlife habitat. Habitat can be created, improved, or maintained in most places, but management is difficult and requires intensive effort.

Very Poor - means that limitations are very severe for the designated element or kind of wildlife habitat. Habitat is difficult to create, improve, or maintain in most places, and management is difficult and requires intensive effort.

Description of Wildlife Habitat Elements

Openland habitat consists of croplands, pastures, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. The kind of wildlife attracted to these areas include bobwhite quail, pheasant, meadowlark, field sparrow, killdeer, cottontail rabbit, red fox, and coyote.

Woodland habitat consists of hardwood or conifers, or a mixture of these and associated grasses, legumes and wild herbaceous plants. Examples of wildlife attracted to this habitat are wild turkey, thrushes, woodpeckers, owl, tree squirrels, raccoon, and deer.

Wetland habitat consists of water-tolerant plants in open, marshy or swampy, shallow water areas. Examples of wildlife attracted to this habitat are ducks, geese, herons, bitterns, rails, kingfishers, shorebirds, muskrat, mink, and beaver.

The elements of wildlife habitat are described in the following paragraphs.

Grain and seed crops are domestic grains and seed-producing herbaceous plants. Soil properties and features that affect the growth of grain and seed crops are depth of the root zone, texture of the surface layer, available water capacity, wetness, slope, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of grain and seed crops are corn, wheat, oats, and barley.

Grasses and legumes are domestic perennial grasses and herbaceous legumes. Soil properties and features that affect the growth of grasses and legumes are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, flooding, and slope. Soil temperature and soil moisture also are considerations. Examples of grasses and legumes are fescue, lovegrass, bromegrass, clover, and alfalfa.

Wild herbaceous plants are native or naturally established grasses and forbs, including weeds. Soil properties and features that affect the growth of these plants are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of wild herbaceous plants are bluestem, goldenrod, beggarweed, wheatgrass, and grama.

Hardwood trees and woody understory produce nuts or other fruit, buds, catkins, twigs, bark, and foliage. Soil properties and features that affect the growth of hardwood trees and shrubs are depth of the root zone, available water capacity, and wetness. Examples of these plants are oak, poplar, cherry, sweetgum, apple, hawthorn, dogwood, hickory, blackberry, and blueberry. Examples of fruit-producing shrubs that are suitable for planting on soils rated good are Russian-olive, autumn-olive, and crabapple.

Coniferous plants furnish browse and seeds. Soil properties and features that affect the growth of coniferous trees, shrubs, and ground cover are depth of the root zone, available water capacity, and wetness. Examples of coniferous plants are pine, spruce, fir, cedar, and juniper.

Shrubs are bushy woody plants that produce fruit, buds, twigs, bark, and foliage. Soil properties and features that affect the growth of shrubs are depth of the root zone, available water capacity, salinity, and soil moisture. Examples of shrubs are fragrant sumac, chokecherry, American plum, sand plum, and gorden currant.

Wetland plants are annual and perennial wild herbaceous plants that grow on moist or wet sites. Submerged or floating aquatic plants are excluded. Soil properties and features affecting wetland plants are texture of the surface layer, wetness, reaction, salinity, slope, and surface stoniness. Examples of wetland plants are smartweed, wild millet, saltgrass, cordgrass, rushes, sedges, and cattails.

WILDLIFE INTERPRETATIONS--Continued
Buffalo County, Nebraska

Shallow water areas have an average depth of less than 5 feet. Some are naturally wet areas. Others are created by dams, levees, or other water-control structures. Soil properties and features affecting shallow water areas are depth to bedrock, wetness, surface stoniness, slope, and permeability. Examples of shallow water areas are marshes, waterfowl feeding areas, and ponds.

The habitat for various kinds of wildlife is described in the following paragraphs.

Habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. Wildlife attracted to these areas include bobwhite quail, pheasant, meadowlark, field sparrow, cottontail, red fox and coyote.

Habitat for woodland wildlife consists of areas of deciduous and/or coniferous plants and associated grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas include wild turkey, thrushes, woodpeckers, squirrels, gray fox, raccoon, and deer.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are ducks, geese, herons, shore birds, muskrat, mink, and beaver.

Habitat for rangeland wildlife consists of areas of shrubs and wild herbaceous plants. Wildlife attracted to rangeland include antelope, deer, cottontail rabbit, prairie chicken, meadowlark, quail, and pheasant.

WILDLIFE INTERPRETATIONS
Buffalo County, Nebraska

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hard-wood trees	Conif-erous plants	Shrubs	Wetland plants	Shallow water areas	Open-land wild-life	Wood-land wild-life	Wetland wild-life	Range-land wild-life
2Gg: GIBBON----------	Poor	Poor	Poor	Good	Fair	Poor	Fair	Fair	Poor	Fair	Fair	Poor
2Hb: HOBBS----------	Good	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor	Good
2Kt: COZAD----------	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
2Or: ANSELMO---------	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
2OrB2: ANSELMO---------	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
2Sc: SCOTT----------	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
2TXA: DUNDAY----------	Fair	Good	Good	Fair	Fair	Fair	Very poor	Very poor	Good	Fair	Very poor	Good
VALENTINE-------	Fair	Good	Fair	Poor	Fair	Fair	Very poor	Very poor	Fair	Poor	Very poor	Fair
AED: ARENTS, EARTHEN DAM----------	---	---	---	---	---	---	---	---	---	---	---	---
Ax: ALDA----------	Fair	Fair	Fair	Good	Good	Good	Fair	Fair	Fair	Good	Fair	Good
Ay: ALDA----------	Fair	Fair	Fair	Good	Good	Good	Fair	Fair	Fair	Good	Fair	Good
Bdn: BLENDON---------	Fair	Fair	Good	Fair	Very poor	---	Very poor	Very poor	Fair	Very poor	Very poor	Good
BdnA: ANSELMO---------	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
Bed: BLENDON---------	Fair	Fair	Good	Fair	Very poor	---	Very poor	Very poor	Fair	Very poor	Very poor	Good
BedA: ANSELMO---------	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
Bob: BOEL----------	Fair	Fair	Good	Good	Good	Good	Fair	Fair	Fair	Good	Poor	Fair
Boc: BOEL----------	Fair	Fair	Good	Good	Good	Good	Fair	Fair	Fair	Good	Poor	Fair
By: COLY----------	Poor	Fair	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor	Fair
HOBBS----------	Poor	Fair	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor	Fair
CbC: COLY----------	Fair	Good	Good	Good	Fair	Fair	Very poor	Very poor	Fair	Good	Very poor	Fair
CbE: COLY----------	Poor	Fair	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor	Fair
Cm: CASS----------	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
Coz: COZAD----------	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good

WILDLIFE INTERPRETATIONS--Continued
Buffalo County, Nebraska

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hard-wood trees	Conif-erous plants	Shrubs	Wetland plants	Shallow water areas	Open-land wild-life	Wood-land wild-life	Wetland wild-life	Range-land wild-life
CozA: COZAD----------	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
CozB2: COZAD----------	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
CozC2: COZAD----------	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
Cs: CASS----------	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
CYE: COLY----------	Poor	Fair	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor	Fair
Gg: GIBBON----------	Good	Good	Good	Good	Fair	Good	Fair	Good	Good	Good	Fair	Good
Gk: GRIGSTON--------	Good	Good	Good	---	---	Fair	Poor	Fair	Good	---	Poor	Fair
GP: PITS----------	Very poor	Very poor	Poor	Poor	Poor	Poor	Very poor	Fair	Very poor	Very poor	Poor	Poor
Ha: HALL----------	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
HaA: HALL----------	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
Hb: HORD----------	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
HbA: HORD----------	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
HbB: HORD----------	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
Hd: HORD----------	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
HdA: HORD----------	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
HoA: HOLDREGE--------	Good	Good	Fair	Good	Fair	Fair	Very poor	Very poor	Good	Good	Very poor	Fair
HoB: HOLDREGE--------	Fair	Good	Fair	Good	Fair	Fair	Very poor	Very poor	Fair	Good	Very poor	Fair
HoB2: HOLDREGE--------	Fair	Good	Fair	Good	Fair	Fair	Very poor	Very poor	Fair	Good	Very poor	Fair
HQ: HOLDREGE--------	Good	Good	Fair	Good	Fair	Fair	Very poor	Very poor	Good	Good	Very poor	Fair
HALL----------	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
In: INAVALE---------	Fair	Fair	Good	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor	Good
KCB: KENESAW---------	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor	Good

WILDLIFE INTERPRETATIONS--Continued
Buffalo County, Nebraska

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hard-wood trees	Conif-erous plants	Shrubs	Wetland plants	Shallow water areas	Open-land wild-life	Wood-land wild-life	Wetland wild-life	Range-land wild-life
COLY----------	Fair	Good	Good	Good	Fair	Fair	Very poor	Very poor	Fair	Good	Very poor	Fair
Ks:												
KENESAW---------	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
KsA:												
KENESAW---------	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
KsB:												
KENESAW---------	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor	Good
Lex:												
LEX----------	Fair	Fair	Good	Fair	Good	Good	Fair	Fair	Fair	Fair	Fair	Good
Lf:												
LESHARA---------	Good	Good	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair	Good
LG:												
GIBBON----------	Good	Good	Good	Good	Fair	Good	Fair	Good	Good	Good	Fair	Good
LESHARA---------	Good	Good	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair	Good
Lm:												
LOUP----------	Very poor	Poor	Fair	Poor	Poor	Fair	Good	Good	Poor	Poor	Good	Fair
Lx:												
GOTHENBURG------	Very poor	Very poor	Fair	Poor	Fair	Fair	Fair	Good	Poor	Poor	Fair	Fair
M:												
FLUVAQUENTS-----	Very poor	Very poor	Poor	Very poor	Very poor	Very poor	Good	Good	Very poor	Very poor	Good	Very poor
M-W:												
MISCELLANEOUS WATER----------	---	---	---	---	---	---	---	---	---	---	---	---
OrC:												
ANSELMO---------	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
P:												
PLATTE----------	Fair	Good	Fair	Poor	Fair	Good	Fair	Good	Fair	Poor	Good	Fair
PL:												
PLATTE----------	Fair	Good	Fair	Poor	Fair	Good	Fair	Good	Fair	Poor	Good	Fair
ALDA----------	Fair	Fair	Fair	Good	Good	Good	Fair	Fair	Fair	Good	Fair	Good
RB:												
COLY----------	Very poor	Very poor	Poor	Poor	Poor	Fair	Very poor	Very poor	Poor	Poor	Very poor	Fair
Ru:												
RUSCO----------	Good	Good	Poor	Good	Good	Good	Poor	Poor	Fair	Good	Poor	Fair
Rw:												
RIVERWASH-------	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Poor	Very poor	Very poor	Poor	Very poor
Sc:												
SCOTT----------	Poor	Fair	Fair	Fair	Fair	Poor	Good	Good	Fair	Fair	Good	Fair
SdA:												
SIMEON----------	Poor	Poor	Fair	Poor	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor	Fair
Slc:												
SILVER CREEK----	Fair	Fair	Good	Good	Good	Good	Fair	Fair	Fair	Good	Fair	Good
Sx:												
BOLENT----------	Poor	Fair	Good	Good	Good	Good	Fair	Very poor	Fair	Good	Poor	Good
TsA:												
DUNDAY----------	Fair	Good	Good	Fair	Fair	Fair	Very poor	Very poor	Good	Fair	Very poor	Good

WILDLIFE INTERPRETATIONS--Continued
Buffalo County, Nebraska

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hard-wood trees	Conif-erous plants	Shrubs	Wetland plants	Shallow water areas	Open-land wild-life	Wood-land wild-life	Wetland wild-life	Range-land wild-life
TXA:												
DUNDAY----------	Fair	Good	Good	Fair	Fair	Fair	Very poor	Very poor	Good	Fair	Very poor	Good
VALENTINE-------	Fair	Good	Fair	Poor	Fair	Fair	Very poor	Very poor	Fair	Poor	Very poor	Fair
TXB:												
DUNDAY----------	Fair	Good	Good	Fair	Fair	Fair	Very poor	Very poor	Good	Fair	Very poor	Good
VALENTINE-------	Poor	Fair	Fair	Poor	Poor	Poor	Very poor	Very poor	Fair	Poor	Very poor	Fair
TYA:												
DUNDAY----------	Fair	Good	Good	Fair	Fair	Fair	Very poor	Very poor	Good	Fair	Very poor	Good
VALENTINE-------	Fair	Good	Fair	Poor	Fair	Fair	Very poor	Very poor	Fair	Poor	Very poor	Fair
UHC:												
HOLDREGE--------	Fair	Good	Fair	Good	Fair	Fair	Very poor	Very poor	Fair	Good	Very poor	Fair
ULY-------------	Fair	Good	Good	Good	Fair	Fair	Very poor	Very poor	Fair	Good	Very poor	Good
UHC2:												
ULY-------------	Fair	Good	Good	Good	Fair	Fair	Very poor	Very poor	Fair	Good	Very poor	Good
COLY------------	Fair	Good	Good	Good	Fair	Fair	Very poor	Very poor	Fair	Good	Very poor	Fair
HOLDREGE--------	Fair	Good	Fair	Good	Fair	Fair	Very poor	Very poor	Fair	Good	Very poor	Fair
UsD:												
ULY-------------	Poor	Fair	Good	Good	Fair	Fair	Very poor	Very poor	Poor	Good	Very poor	Fair
VbC:												
VALENTINE-------	Poor	Fair	Fair	Poor	Poor	Poor	Very poor	Very poor	Fair	Poor	Very poor	Fair
W:												
WATER-----------	---	---	---	---	---	---	---	---	---	---	---	---
Wb:												
WANN------------	Good	Good	Good	Good	Fair	Good	Poor	Fair	Good	Good	Fair	Good
Wm:												
WANN------------	Good	Good	Good	Good	Fair	Good	Poor	Fair	Good	Good	Fair	Good
Wr:												
WOOD RIVER------	Good	Good	Poor	Fair	Good	Poor	Very poor	Very poor	Fair	Good	Very poor	Poor
WrA:												
WOOD RIVER------	Good	Good	Poor	Fair	Good	Poor	Very poor	Very poor	Fair	Good	Very poor	Poor
WS:												
WOOD RIVER------	Good	Good	Poor	Fair	Good	Poor	Very poor	Very poor	Fair	Good	Very poor	Poor
GAYVILLE VARIANT	Poor	Poor	Fair	Fair	Fair	Fair	Poor	Fair	Poor	Fair	Poor	Fair
Wx:												
BARNEY----------	Very poor	Poor	Fair	Poor	Poor	Poor	Good	Good	Poor	Fair	Good	Fair

YIELDS PER ACRE OF PASTURE AND HAYLAND
Buffalo County, Nebraska

Use and Explanation of Pastureland and Hayland Interpretations

This subsection provides information concerning the suitability of soils for the production of pasture and hayland. This subsection may contain pasture and hayland suitability groupings, land capability and yield estimates, yield estimates for individual grasses or legumes, or other information pertaining to the production of forage.

Pasture and Hayland Suitability Groupings

Soils are placed in pasture and hayland groups according to their suitability for the production of forage. The soils in each group are enough alike to be suited to the same grasses or legumes, to have similar limitations and hazards, to require similar management, and to have similar productivity and other responses to management. Thus, the pasture and hayland suitability group is a convenient way of grouping the soils for their management. If used, these groupings are identified and described in other reports in the subsection.

Yield Estimates

The average yields per acre that can be expected of the principal pasture or hayland crops, under a high level of management, are presented in this subsection. In any given year, yields may be higher or lower than those indicated in the tables because of variations in rainfall or other climatic factors. The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations are also considered.

Under good management, proper grazing is essential for the production of high quality forage, stand survival, and erosion control. Proper grazing helps plants maintain sufficient and generally vigorous top growth during the growing season. Brush control is essential in many areas, and weed control generally is needed. Rotation grazing and renovation are also important management practices.

The Pasture and Hayland table show yield estimates in tons per acre and animal unit months for pasture and hayland groups. An animal unit month is the amount of forage required by one animal unit (AU) for 30 days. On animal unit (AU) is one (1000 pound) mature cow and a calf up to weaning age (usually six months of age) or their equivalent. The Natural Resources Conservation Service uses 900 pounds of air dry forage as the amount needed to meet this requirement. To maintain a healthy and vigorous plant community, the degree of use should never be greater than 50 percent. Therefore only 25 percent of the total biomass grown is considered consumed by the grazing animal. Animal Unit Months can be converted to air dry pounds per acre production by multiplying the AUM by 30 days, then by 30 pounds per day, and then by four. This figure is the amount of total forage production.

Planners of management systems for individual fields or farms should consider the detailed information given in the description of each soil in the Nontechnical Description section. Specific information on plants and yields can be obtained from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

YIELDS PER ACRE OF PASTURE AND HAYLAND--Continued
Buffalo County, Nebraska

(Yields in the "N" columns are for nonirrigated soils; those in the "I" columns are for irrigated soils. Yields are those that can be expected under a high level of nonirrigated and irrigated management by component. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil) Animal-unit-month: The amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

Map symbol and soil name	Land capability		Alfalfa hay		Pasture	
	N	I	N	I	N	I
			Tons	Tons	AUM	AUM
2Gg: Gibbon	4s	3s	4.20	4.50	2.00	10.00
2Hb: Hobbs	2w	2w	---	---	3.20	11.00
2Kt: Cozad	2e	2e	3.50	5.90	2.30	10.50
2Or: Anselmo	2e	2e	3.20	5.80	2.20	10.50
2OrB2: Anselmo	3e	3e	3.20	3.50	2.00	9.00
2Sc: Scott	3w	3w	---	---	---	---
2TXA: Dunday	4e	3e	4.50	4.50	1.40	9.00
Valentine	4e	4e	4.50	4.50	1.40	9.00
AED: Arents, Earthen Dam	8	---	---	---	---	---
Ax: Alda	3w	3w	3.40	3.60	2.30	9.00
Ay: Alda	3w	3w	3.50	4.00	2.30	9.00
Bdn: Blendon	2e	2e	3.40	6.40	2.20	10.50
BdnA: Anselmo	2e	2e	2.90	5.80	2.20	10.50
Bed: Blendon	2c	1	3.80	6.50	3.00	11.00
BedA: Anselmo	2e	2e	3.40	6.40	3.00	11.00
Bob: Boel	3w	3w	4.20	4.20	1.70	9.00
Boc: Boel	3w	3w	4.20	4.50	1.70	9.00
By: Coly	6e	---	---	---	---	---
Hobbs	6w	---	---	---	---	---
CbC: Coly	4e	4e	2.70	5.00	2.20	8.00
CbE: Coly	6e	---	---	---	---	---
Cm: Cass	1	1	4.50	6.00	2.60	10.50
Coz: Cozad	2c	1	4.00	7.00	3.00	11.00
CozA: Cozad	2e	2e	3.80	6.50	3.00	11.00
CozB2: Cozad	3e	3e	3.20	5.70	2.30	10.30
CozC2: Cozad	4e	4e	2.70	5.00	2.20	8.00
Cs: Cass	2e	2e	4.30	6.00	2.20	10.50

YIELDS PER ACRE OF PASTURE AND HAYLAND--Continued
Buffalo County, Nebraska

(Yields in the "N" columns are for nonirrigated soils; those in the "I" columns are for irrigated soils. Yields are those that can be expected under a high level of nonirrigated and irrigated management by component. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil) Animal-unit-month: The amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

Map symbol and soil name	Land capability		Alfalfa hay		Pasture	
	N	I	N	I	N	I
			Tons	Tons	AUM	AUM
CYE:						
Coly	6e	---	---	---	---	---
Gg:						
Gibbon	2w	2w	4.80	58.00	3.00	11.00
Gk:						
Grigston	1	1	5.00	7.00	3.00	11.00
GP:						
Pits	8s	---	---	---	---	---
Ha:						
Hall	2c	1	4.50	7.00	3.00	11.00
HaA:						
Hall	2e	2e	3.80	6.50	3.00	11.00
Hb:						
Hord	2c	1	4.80	7.00	3.00	11.00
HbA:						
Hord	2e	2e	4.60	6.50	3.00	11.00
HbB:						
Hord	3e	3e	3.80	5.70	2.50	10.30
Hd:						
Hord	2c	1	4.50	7.00	3.00	11.00
HdA:						
Hord	2e	2e	4.00	6.50	3.00	11.00
HoA:						
Holdrege	2e	2e	3.80	6.30	3.00	11.00
HoB:						
Holdrege	3e	3e	3.70	5.70	2.30	10.30
HoB2:						
Holdrege	3e	3e	3.50	58.70	2.30	10.30
HQ:						
Holdrege	2c	1	4.00	7.00	3.00	11.00
Hall	2c	1	4.00	7.00	3.00	11.00
In:						
Inavale	3e	3e	3.20	4.00	1.50	9.00
KCB:						
Kenesaw	3e	3e	3.00	5.70	2.30	10.30
Coly	3e	3e	3.00	5.70	2.30	10.30
Ks:						
Kenesaw	2c	1	4.00	6.60	3.00	11.00
KsA:						
Kenesaw	2e	2e	3.80	6.20	3.00	11.00
KsB:						
Kenesaw	3e	3e	---	---	---	---
Lex:						
Lex	3w	3w	3.70	4.00	2.30	9.00
Lf:						
Leshara	2w	2w	4.30	5.00	3.00	11.00
LG:						
Gibbon	2w	2w	4.50	5.00	3.00	11.00
Leshara	2w	2w	4.50	5.00	3.00	11.00
Lm:						
Loup	5w	---	---	---	---	---
Lx:						
Gothenburg	7s	---	---	---	---	---

YIELDS PER ACRE OF PASTURE AND HAYLAND--Continued
Buffalo County, Nebraska

(Yields in the "N" columns are for nonirrigated soils; those in the "I" columns are for irrigated soils. Yields are those that can be expected under a high level of nonirrigated and irrigated management by component. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil) Animal-unit-month: The amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

Map symbol and soil name	Land capability		Alfalfa hay		Pasture	
	N	I	N	I	N	I
			Tons	Tons	AUM	AUM
M:						
Fluvaquents	8w	---	---	---	---	---
M-W:						
Miscellaneous Water	---	---	---	---	---	---
OrC:						
Anselmo	4e	4e	2.10	---	1.00	---
P:						
Platte	6w	4w	---	2.00	---	8.00
PL:						
Platte	6w	4w	---	2.30	---	8.00
Alda	3w	3w	---	2.30	---	8.00
RB:						
Coly	7e	---	---	---	---	---
Ru:						
Rusco	2c	1	---	---	3.00	11.00
Rw:						
Riverwash	8w	---	---	---	---	---
Sc:						
Scott	4w	---	---	---	---	---
SdA:						
Simeon	6s	4s	---	---	---	---
Slc:						
Silver Creek	3w	3w	4.30	5.00	2.70	10.00
Sx:						
Bolent	6w	---	---	---	---	---
TsA:						
Dunday	4e	3e	2.70	3.00	1.40	9.00
TXA:						
Dunday	4e	3e	2.70	3.00	1.40	9.00
Valentine	4e	4e	2.70	3.00	1.40	9.00
TXB:						
Dunday	4e	4e	1.90	2.50	1.00	8.00
Valentine	6e	4e	1.90	2.50	1.00	8.00
TYA:						
Dunday	4e	3e	2.70	3.00	1.40	9.00
Valentine	4e	4e	2.70	3.00	1.40	9.00
UHC:						
Holdrege	4e	4e	---	---	---	---
Uly	4e	4e	---	---	---	---
UHC2:						
Uly	4e	4e	2.70	5.00	2.50	9.00
Coly	4e	4e	2.70	5.00	2.50	9.00
Holdrege	4e	4e	2.70	5.00	2.50	9.00
UsD:						
Uly	6e	---	---	---	---	---
VbC:						
Valentine	6e	---	---	---	---	---
W:						
Water	---	---	---	---	---	---
Wb:						
Wann	2w	2w	4.20	4.50	3.00	11.00

YIELDS PER ACRE OF PASTURE AND HAYLAND--Continued
Buffalo County, Nebraska

(Yields in the "N" columns are for nonirrigated soils; those in the "I" columns are for irrigated soils. Yields are those that can be expected under a high level of nonirrigated and irrigated management by component. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil) Animal-unit-month: The amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

Map symbol and soil name	Land capability		Alfalfa hay		Pasture	
	N	I	N	I	N	I
			Tons	Tons	AUM	AUM
Wm:						
Wann	2w	2w	4.20	4.50	3.00	11.00
Wr:						
Wood River	2s	2s	3.70	6.00	2.60	10.50
WrA:						
Wood River	2e	3e	3.70	6.00	2.60	10.50
WS:						
Wood River	4s	3s	3.50	5.70	2.60	10.00
Gayville Variant	4s	4s	3.50	5.70	2.60	10.00
Wx:						
Barney	5w	---	---	---	---	---

CONSERVATION TREE AND SHRUB MANAGEMENT
Buffalo County, Nebraska

A Conservation Tree/Shrub Suitability Group (CTSG), formerly Windbreak Suitability Group, is a physiographic unit or area having similar climatic and edaphic characteristics that control the selection and height growth of trees and shrubs.

In this table, the Conservation Tree and Shrub Grouping is expressed as a group index number. The group index for Conservation Tree and Shrub groups (CTSG) are a guide for species best suited for different kinds of soil and for prediction height, growth, and effectiveness. The groupings can be used when selection woody plants for windbreaks, wildlife plantings riparian buffers, reforestation, other environmental plantings, recreation, landscaping, wetland restoration or enhancement and critical area plantings. CTSG's are developed to assure satisfactory species selection and adaptation to specific conditions of soil, climate and physiography. CTSG's are a guide for selection species best suited for different kinds of soil and prediction height growth and effectiveness.

All soil series mapped in the state have been placed in 10 groups of similar soil characteristics. Groups 1, 2, 3, 4, 6, and 9 are further divided into subgroups. In addition, all groups provide information by Major Land Resource Areas.

Each tree or shrub species has certain climatic and physiographic limits. Within these parameters a tree or shrub may be well or poorly suited because of soil characteristics. Each tree or shrub also has definable potentials of height growth depending on the factors just mentioned. Accurate definitions of potential heights are necessary for proper windbreak planning and design.

Windbreaks protect livestock, buildings, roads and yards from wind and snow. They also protect fruit trees and gardens, and they furnish habitat for wildlife. Several rows of low-growing and high-growing broadleaf and coniferous trees and shrubs provide the most protection.

Field windbreaks are narrow plantings made at right angles to the prevailing wind and at specific intervals across the field. The interval depends on the erodibility of the soil. Field windbreaks protect cropland and crops from wind, help to keep snow on the fields, and provide food and cover for wildlife.

Environmental plantings help to beautify and screen houses and other buildings and to abate noise. The plants, mostly evergreen shrubs and trees, are closely spaced. To ensure plant survival, a healthy planting stock of suitable species should be planted properly on a well prepared site and maintained in good condition.

Windbreaks are often planted on land that did not grow trees originally. Knowledge of how trees perform on such land can be gained only by observing and recording their performance where trees have been planted and survived. The problem is compounded by the fact that many favorite windbreak species are not indigenous to the areas in which they are planted.

The Kansas Field Office Technical Guide Notice KS-230, Conservation Tree and Shrub Plantings Suitability Groups shows the adapted species listing for each group index number. Showing the height that locally grown trees and shrubs are expected to reach in 20 years on various soils. The estimates are based on measurements and observation of established plantings that have been given adequate care. This information should be used to determine the placement of a windbreak, the area protected and the arrangement of species.

A number of attributes are included in the CTSG species tables for each group number found in this section of the Field Office Technical Guide. These attributes were rated subjectively and assigned a relative value to further assist those unfamiliar with individual species characteristics or desirability for the intended use. Definitions and explanations can be found. Additional information on planning windbreaks and screens and planting and caring for trees and shrubs can be obtained from the local office of the Natural Resources Conservation Service or of the Cooperative Extension Service or from a commercial nursery. See part 537 of the National Forestry Manual for additional information.

In the Tree and Shrub Management table interpretive ratings are given for various aspects of forest and conservation tree and shrub management. Some rating class terms indicate the degree to which the soils are suited to a specified forest management practice. Well suited indicates that the soil has features that are favorable for the specified practice and has no limitations. Good performance can be expected, and little or no maintenance is needed. Moderately well suited indicates that the soil has features that are moderately favorable for the specified practice. One or more soil properties are less than desirable and fair performance can be expected. Some maintenance is needed. Poorly suited indicates that the soil has one or more properties that are unfavorable for the specified practice. Overcoming the unfavorable properties requires special design, extra maintenance, and costly alteration. Unsuited indicates that the expected performance of the soil is unacceptable for the specified practice or that extreme measures are needed to overcome the undesirable soil properties.

The paragraphs that follow indicate the soil properties considered in rating the soils for forest and conservation tree and shrub management practices. More detailed information about the criteria used in the ratings is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet. Also, in the Kansas Field Office Technical Guide Notice KS-230, Conservation Tree and Shrub Plantings Suitability Groups.

Ratings in the columns suitability for hand planting and suitability for mechanical planting are based on slope, depth to a restrictive layer, content of sand, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, moderately well suited, poorly suited, or unsuited to these methods of planting. It is assumed that necessary site preparation is completed before seedlings are planted.

Ratings in the column suitability for mechanical site preparation (surface) are based on slope, depth to a restrictive layer, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, poorly suited, or unsuited to this management activity. The part of the soil from the surface to a depth of about 1-foot is considered in the ratings.

Ratings in the column suitability for mechanical site preparation (deep) are based on slope, depth to a restrictive layer, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, poorly suited, or unsuited to this management activity. The part of the soil from the surface to a depth of about 3 feet is considered in the ratings.

Ratings in the column potential for seedling mortality are based on flooding, ponding, depth to a water table, content of lime, reaction, salinity, available water capacity, soil moisture regime, soil temperature regime, aspect, and slope. The soils are described as having a low, moderate, or high potential for seedling mortality. See the National Forestry Manual, Subpart B for criteria used in rating management concerns. Specific information on plants and yields can be obtained from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

CONSERVATION TREE AND SHRUB MANAGEMENT
Buffalo County,
Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. Pines and spruces are prone to disease problems. See text for further explanation of ratings in this table.)

Map symbol and soil name	Windbreak Group	Suitability for hand planting	Suitability for mechanical planting	Suitability for mechanical site preparation (surface)	Suitability for mechanical site preparation (deep)	Potential for seedling mortality
		Rating class and limiting features	Rating class and limiting features	Rating class and limiting features	Rating class and limiting features	Rating class and limiting features
2Gg: Gibbon		Well suited	Well suited	Well suited	Well suited	High Salinity Soil reaction
2Hb: Hobbs		Well suited	Well suited	Well suited	Well suited	Low
2Kt: Cozad		Well suited	Well suited	Well suited	Well suited	Low
2Or: Anselmo		Well suited	Well suited	Well suited	Well suited	Low
2OrB2: Anselmo		Well suited	Well suited	Well suited	Well suited	Low
2Sc: Scott		Poorly suited Stickiness	Poorly suited Stickiness	Poorly suited Stickiness	Well suited	High Wetness
2TXA: Dunday		Well suited	Well suited	Well suited	Well suited	Low
Valentine		Well suited	Well suited	Well suited	Well suited	Low
AED: Arents, Earthen Dam-		Not rated	Not rated	Not rated	Not rated	Not rated
Ax: Alda		Well suited	Well suited	Well suited	Well suited	Low
Ay: Alda		Well suited	Well suited	Well suited	Well suited	Low
Bdn: Blendon		Well suited	Well suited	Well suited	Well suited	Low
BdnA: Anselmo		Well suited	Well suited	Well suited	Well suited	Low
Bed: Blendon		Well suited	Well suited	Well suited	Well suited	Low
BedA: Anselmo		Well suited	Well suited	Well suited	Well suited	Low
Bob: Boel		Well suited	Well suited	Well suited	Well suited	Low
Boc: Boel		Well suited	Well suited	Well suited	Well suited	Low
By: Coly		Well suited	Poorly suited Slope	Poorly suited Slope	Poorly suited Slope	Moderate Soil reaction
Hobbs		Well suited	Well suited	Well suited	Well suited	Low
CbC: Coly		Well suited	Moderately suited Slope	Well suited	Well suited	Moderate Soil reaction
CbE: Coly		Well suited	Poorly suited Slope	Poorly suited Slope	Poorly suited Slope	Moderate Soil reaction
Cm: Cass		Well suited	Well suited	Well suited	Well suited	Low
Coz: Cozad		Well suited	Well suited	Well suited	Well suited	Low
CozA: Cozad		Well suited	Well suited	Well suited	Well suited	Low
CozB2: Cozad		Well suited	Well suited	Well suited	Well suited	Low
CozC2: Cozad		Well suited	Moderately suited Slope	Well suited	Well suited	Low
Cs: Cass		Well suited	Well suited	Well suited	Well suited	Low
CYE: Coly		Well suited	Poorly suited Slope	Poorly suited Slope	Poorly suited Slope	Moderate Soil reaction
Gg: Gibbon		Well suited	Well suited	Well suited	Well suited	Moderate Soil reaction
Gk: Grigston		Well suited	Well suited	Well suited	Well suited	Low
GP: Pits		Not rated	Not rated	Not rated	Not rated	Not rated
Ha: Hall		Well suited	Well suited	Well suited	Well suited	Low
HaA: Hall		Well suited	Well suited	Well suited	Well suited	Low
Hb: Hord		Well suited	Well suited	Well suited	Well suited	Low

CONSERVATION TREE AND SHRUB MANAGEMENT
Buffalo County,
Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. Pines and spruces are prone to disease problems. See text for further explanation of ratings in this table.)

Map symbol and soil name	Windbreak Group	Suitability for hand planting	Suitability for mechanical planting	Suitability for mechanical site preparation (surface)	Suitability for mechanical site preparation (deep)	Potential for seedling mortality
		Rating class and limiting features	Rating class and limiting features	Rating class and limiting features	Rating class and limiting features	Rating class and limiting features
HbA:						
Hord		Well suited	Well suited	Well suited	Well suited	Low
HbB:						
Hord		Well suited	Well suited	Well suited	Well suited	Low
Hd:						
Hord		Well suited	Well suited	Well suited	Well suited	Low
HdA:						
Hord		Well suited	Well suited	Well suited	Well suited	Low
HoA:						
Holdrege		Well suited	Well suited	Well suited	Well suited	Low
HoB:						
Holdrege		Well suited	Well suited	Well suited	Well suited	Low
HoB2:						
Holdrege		Moderately suited Stickiness	Moderately suited Stickiness	Well suited	Well suited	Low
HQ:						
Holdrege		Well suited	Well suited	Well suited	Well suited	Low
Hall		Well suited	Well suited	Well suited	Well suited	Low
In:						
Inavale		Well suited	Well suited	Well suited	Well suited	Low
KCB:						
Kenesaw		Well suited	Well suited	Well suited	Well suited	Low
Coly		Well suited	Well suited	Well suited	Well suited	Moderate Soil reaction
Ks:						
Kenesaw		Well suited	Well suited	Well suited	Well suited	Low
KsA:						
Kenesaw		Well suited	Well suited	Well suited	Well suited	Low
KsB:						
Kenesaw		Well suited	Well suited	Well suited	Well suited	Low
Lex:						
Lex		Well suited	Well suited	Well suited	Well suited	Low
Lf:						
Leshara		Well suited	Well suited	Well suited	Well suited	Low
LG:						
Gibbon		Well suited	Well suited	Well suited	Well suited	Moderate Soil reaction
Leshara		Well suited	Well suited	Well suited	Well suited	Low
Lm:						
Loup		Well suited	Well suited	Well suited	Well suited	High Wetness
Lx:						
Gothenburg		Well suited	Well suited	Well suited	Well suited	High Wetness
M:						
Fluvaquents		Unsuited Wetness Sandiness	Poorly suited Wetness Sandiness	Unsuited Wetness	Unsuited Wetness	High Wetness
M-W:						
Miscellaneous Water-		Not rated	Not rated	Not rated	Not rated	Not rated
OrC:						
Anselmo		Well suited	Moderately suited Slope	Well suited	Well suited	Low
P:						
Platte		Well suited	Well suited	Well suited	Well suited	Low
PL:						
Platte		Well suited	Well suited	Well suited	Well suited	Low
Alda		Well suited	Well suited	Well suited	Well suited	Low
RB:						
Coly		Moderately suited Slope	Unsuited Slope	Unsuited Slope	Unsuited Slope	Moderate Soil reaction
Ru:						
Rusco		Moderately suited Stickiness	Moderately suited Stickiness	Well suited	Well suited	High Wetness
Rw:						
Riverwash		Not rated	Not rated	Not rated	Not rated	Not rated
Sc:						
Scott		Poorly suited Stickiness	Poorly suited Stickiness	Poorly suited Stickiness	Well suited	High Wetness
SdA:						
Simeon		Moderately suited	Moderately suited	Well suited	Well suited	Low

CONSERVATION TREE AND SHRUB MANAGEMENT
Buffalo County,
Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. Pines and spruces are prone to disease problems. See text for further explanation of ratings in this table.)

Map symbol and soil name	Wind break Group	Suitability for hand planting	Suitability for mechanical planting	Suitability for mechanical site preparation (surface)	Suitability for mechanical site preparation (deep)	Potential for seedling mortality
		Rating class and limiting features	Rating class and limiting features	Rating class and limiting features	Rating class and limiting features	Rating class and limiting features
		Sandiness	Sandiness			
Slc:						
Silver Creek--------		Moderately suited Stickiness	Moderately suited Stickiness	Poorly suited Stickiness	Well suited	Moderate Salinity
Sx:						
Bolent--------------		Moderately suited Sandiness	Moderately suited Sandiness	Well suited	Well suited	Low
TsA:						
Dunday--------------		Well suited	Well suited	Well suited	Well suited	Low
TXA:						
Dunday--------------		Well suited	Well suited	Well suited	Well suited	Low
Valentine-----------		Moderately suited Sandiness	Moderately suited Sandiness	Well suited	Well suited	Low
TXB:						
Dunday--------------		Well suited	Well suited	Well suited	Well suited	Low
Valentine-----------		Moderately suited Sandiness	Moderately suited Sandiness	Well suited	Well suited	Low
TYA:						
Dunday--------------		Well suited	Well suited	Well suited	Well suited	Low
Valentine-----------		Moderately suited Sandiness	Moderately suited Sandiness	Well suited	Well suited	Low
UHC:						
Holdrege------------		Well suited	Moderately suited Slope	Well suited	Well suited	Low
Uly-----------------		Well suited	Moderately suited Slope	Well suited	Well suited	Low
UHC2:						
Uly-----------------		Well suited	Moderately suited Slope	Well suited	Well suited	Low
Coly----------------		Well suited	Moderately suited Slope	Well suited	Well suited	Moderate Soil reaction
Holdrege------------		Moderately suited Stickiness	Moderately suited Stickiness Slope	Well suited	Well suited	Low
UsD:						
Uly-----------------		Well suited	Moderately suited Slope	Well suited	Well suited	Low
VbC:						
Valentine-----------		Moderately suited Sandiness	Moderately suited Slope Sandiness	Well suited	Well suited	Low
W:						
Water---------------		Not rated	Not rated	Not rated	Not rated	Not rated
Wb:						
Wann----------------		Well suited	Well suited	Well suited	Well suited	Low
Wm:						
Wann----------------		Well suited	Well suited	Well suited	Well suited	Low
Wr:						
Wood River----------		Poorly suited Stickiness	Poorly suited Stickiness	Poorly suited Stickiness	Well suited	Low
WrA:						
Wood River----------		Poorly suited Stickiness	Poorly suited Stickiness	Poorly suited Stickiness	Well suited	Low
WS:						
Wood River----------		Poorly suited Stickiness	Poorly suited Stickiness	Poorly suited Stickiness	Well suited	Moderate Salinity
Gayville Variant----		Well suited	Well suited	Well suited	Well suited	Low
Wx:						
Barney--------------		Moderately suited Sandiness	Moderately suited Sandiness	Well suited	Well suited	High Wetness

ENGINEERING INDEX PROPERTIES
Buffalo County, Nebraska

Engineering Index Properties table gives the engineering classifications and the range of index properties for the layers of each soil in the survey area. Depth to the upper and lower boundaries of each layer is indicated. Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. Loam, for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, gravelly. Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 1998) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 1998). The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection. If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest. The AASHTO classification for soils tested, with group index numbers in parentheses, is given in Engineering Index Properties table.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage. Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and plasticity index (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination. The estimates of particle-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is generally omitted in the table.

ENGINEERING INDEX PROPERTIES--Continued
Buffalo County, Nebraska

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2Gg:												
Gibbon---------	0-9	Silt loam	CL	A-4, A-6, A-7	0	0	100	100	90-100	70-90	25-45	8-20
	9-40	Silt loam	CL	A-6, A-7	0	0	100	100	95-100	80-95	30-45	10-20
	40-80	Silty clay loam	CL	A-7	0	0	100	100	95-100	85-95	40-50	20-28
2Hb:												
Hobbs----------	0-28	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	85-100	25-40	5-20
	28-60	Stratified silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	85-100	25-40	5-20
2Kt:												
Cozad----------	0-12	Fine sandy loam	ML, SM	A-4	0	0	100	100	70-85	40-55	15-20	NP-5
	12-58	Loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	90-100	80-95	20-35	2-12
	58-60	Fine sandy loam	SM, ML	A-4	0	0	100	100	70-85	40-55	15-20	NP-5
2Or:												
Anselmo--------	0-17	Fine sandy loam	SM, SC-SM, ML, CL-ML	A-2, A-4	0	0	100	100	60-100	30-65	15-25	NP-7
	17-46	Loamy fine sand	SP-SM, SM, SC-SM	A-2, A-3	0	0	100	100	70-90	5-30	15-20	NP-5
	46-53	Fine sandy loam	SM, SC-SM	A-4	0	0	100	100	70-85	40-50	15-25	NP-7
	53-60	Silt loam	ML, CL-ML, CL	A-4, A-6	0	0	100	100	95-100	80-100	20-35	2-12
2OrB2:												
Anselmo--------	0-17	Fine sandy loam	SM, SC-SM, ML, CL-ML	A-2, A-4	0	0	100	100	60-100	30-65	15-25	NP-7
	17-46	Loamy fine sand	SP-SM, SM, SC-SM	A-2, A-3	0	0	100	100	70-90	5-30	15-20	NP-5
	46-53	Fine sandy loam	SM, SC-SM	A-4	0	0	100	100	70-85	40-50	15-25	NP-7
	53-60	Silt loam	CL-ML, CL, ML	A-4, A-6	0	0	100	100	95-100	80-100	20-35	2-12
2Sc:												
Scott----------	0-9	Silt loam	ML, CL-ML, CL	A-4, A-6, A-7	0	0	100	100	100	95-100	20-45	2-20
	9-42	Silty clay	CL, CH	A-7	0	0	100	100	100	95-100	41-75	20-45
	42-52	Silty clay loam	CL, CH	A-6, A-7	0	0	100	100	100	95-100	35-60	20-40
	52-60	Silt loam	CL	A-4, A-6, A-7	0	0	100	100	90-100	90-100	25-50	8-24
2TXA:												
Dunday---------	0-11	Loamy fine sand	SM, SC-SM	A-2	0	0	100	100	90-100	13-35	15-25	NP-5
	11-60	Fine sand	SM, SC-SM, SP-SM	A-2, A-3	0	0	100	100	50-95	5-35	15-25	NP-5
Valentine------	0-5	Loamy fine sand	SM, SP, SP-SM	A-2, A-3	0	0	100	100	95-100	2-35	15-20	NP-5
	5-30	Loamy sand	SP-SM, SP, SM	A-2, A-3	0	0	100	100	90-100	2-35	15-20	NP-5
	30-60	Fine sand	SM, SP, SP-SM	A-2, A-3	0	0	100	100	70-100	2-25	15-20	NP-5
AED:												
Arents, Earthen Dam----------	---	---	---	---	---	---	---	---	---	---	---	---
Ax:												
Alda-----------	0-8	Fine sandy loam	SC-SM, SM	A-2, A-4	0	0	100	100	70-100	30-50	15-20	NP-5
	8-26	Fine sandy loam	SC-SM, SM	A-2, A-4	0	0	100	95-100	70-100	30-50	15-26	NP-7
	26-80	Stratified gravelly sand	SP-SM, SC-SM, SM, SP	A-1, A-2, A-3	0	0	70-100	65-95	30-95	2-15	15-20	NP-5
Ay:												
Alda-----------	0-8	Loam	CL, CL-ML, ML	A-4	0	0	100	100	85-100	50-75	20-35	3-10
	8-26	Fine sandy loam	SM, SC-SM	A-2, A-4	0	0	100	95-100	70-100	30-50	15-26	NP-7
	26-80	Stratified gravelly sand	SC-SM, SM, SP, SP-SM	A-1, A-2, A-3	0	0	70-100	65-95	30-95	2-15	15-20	NP-5
Bdn:												
Blendon--------	0-26	Fine sandy loam	SM	A-4	0	0	100	100	60-100	35-50	20-30	NP-5
	26-36	Fine sandy loam	SC-SM, SM, SC	A-2, A-4	0	0	100	100	60-100	20-45	15-30	NP-10
	36-42	Loamy fine sand	SP-SM, SM, SC-SM	A-2, A-4	0	0	100	65-100	50-100	10-45	15-25	NP-5
	42-80	Gravelly sand	SM, SC-SM, SP, SP-SM	A-1, A-2, A-3	0	0	70-100	65-95	30-95	2-15	15-20	NP-5
BdnA:												
Anselmo--------	0-14	Fine sandy loam	SC-SM, SM, ML, CL-ML	A-2, A-4	0	0	100	100	60-100	30-65	15-25	NP-7
	14-26	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	100	100	70-95	35-65	15-25	NP-7
	26-36	Fine sandy loam	SC-SM, SM	A-4	0	0	100	100	70-85	40-50	15-25	NP-7
	36-80	Loamy fine sand	SC-SM, SM	A-2	0	0	100	100	50-80	15-35	15-20	NP-5
Bed:												
Blendon--------	0-17	Loam	ML, CL-ML, CL	A-4, A-6	0	0	100	100	85-100	60-75	20-40	NP-15
	17-26	Fine sandy loam	CL, ML, SC, SM	A-2, A-4	0	0	100	100	60-100	20-65	20-30	NP-10
	26-36	Fine sandy loam	SC, SM, SC-SM	A-2, A-4	0	0	100	85-100	60-100	20-45	15-30	NP-10
	42-80	Stratified gravelly sand	SC-SM, SM, SP, SP-SM	A-1, A-2, A-3	0	0	70-100	65-95	30-95	2-15	15-20	NP-5
BedA:												
Anselmo--------	0-14	Loam	ML, CL-ML	A-4	0	0	100	100	85-100	60-75	15-20	NP-5
	14-26	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	100	100	70-95	35-65	15-25	NP-7
	26-36	Fine sandy loam	SM, SC-SM	A-4	0	0	100	100	70-85	40-50	15-25	NP-7
	36-80	Fine sand	SM, SC-SM	A-2	0	0	100	100	50-80	15-35	15-20	NP-5
Bob:												
Boel-----------	0-14	Fine sandy loam	SM, SC-SM	A-2, A-4	0	0	100	100	85-95	20-40	15-20	NP-5
	14-80	Stratified fine sand	SP, SM, SC-SM	A-2, A-3	0	0	100	95-100	85-95	0-25	10-20	NP-5
Boc:												
Boel-----------	0-14	Loam	ML	A-4	0	0	100	100	85-100	70-95	24-37	2-10
	14-80	Fine sand	SC-SM, SM, SP	A-2, A-3	0	0	100	95-100	85-95	0-25	10-20	NP-5

ENGINEERING INDEX PROPERTIES--Continued
Buffalo County, Nebraska

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
By:												
Coly----------	0-4	Silt loam	CL, CL-ML, ML	A-4, A-6, A-7	0	0	100	100	85-100	85-100	20-45	2-20
	4-60	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	85-100	85-100	20-40	2-15
Hobbs----------	0-28	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	95-100	85-100	25-40	5-20
	28-60	Stratified silt loam	CL, CL-ML, MH	A-4, A-6, A-7	0	0	100	100	95-100	80-100	25-55	5-25
CbC:												
Coly----------	0-8	Silt loam	CL-ML, ML, CL	A-4, A-6, A-7	0	0	100	100	85-100	85-100	20-45	2-20
	8-80	Silt loam	CL-ML, ML, CL	A-4, A-6	0	0	100	100	85-100	85-100	20-40	2-15
CbE:												
Coly----------	0-8	Silt loam	CL, CL-ML, ML	A-4, A-6, A-7	0	0	100	100	85-100	85-100	20-45	2-20
	8-80	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	85-100	85-100	20-40	2-15
Cm:												
Cass----------	0-17	Loam	CL, CL-ML	A-4, A-6	0	0	100	100	85-95	60-75	25-40	5-15
	17-33	Fine sandy loam	SM, SC-SM	A-2, A-4	0	0	100	95-100	85-95	20-50	15-20	NP-5
	33-80	Fine sand	SM, SP-SM	A-2, A-3	0	0	95-100	95-100	50-75	5-30	10-15	NP-4
Coz:												
Cozad----------	0-18	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	100	75-100	20-35	2-12
	18-48	Loam	ML, CL, CL-ML	A-4, A-6	0	0	100	100	90-100	80-95	20-35	2-12
	48-80	Loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	80-100	50-100	20-35	2-12
CozA:												
Cozad----------	0-18	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	100	75-100	20-35	2-12
	18-48	Loam	CL-ML, ML, CL	A-4, A-6	0	0	100	100	90-100	80-95	20-35	2-12
	48-80	Loam	ML, CL, CL-ML	A-4, A-6	0	0	100	100	80-100	50-100	20-35	2-12
CozB2:												
Cozad----------	0-7	Silt loam	ML, CL-ML, CL	A-4, A-6	0	0	100	100	100	75-100	20-35	2-12
	7-38	Loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	90-100	80-95	20-35	2-12
	38-80	Loam	CL, ML, CL-ML	A-4, A-6	0	0	100	100	80-100	50-100	20-35	2-12
CozC2:												
Cozad----------	0-5	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	100	75-100	20-35	2-12
	5-40	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	90-100	80-95	20-35	2-12
	40-80	Loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	80-100	50-95	20-35	2-12
Cs:												
Cass----------	0-11	Fine sandy loam	SC-SM, SM	A-2, A-4	0	0	100	95-100	85-95	20-40	15-20	NP-5
	11-33	Fine sandy loam	SC-SM, SM	A-2, A-4	0	0	100	95-100	85-95	20-50	15-20	NP-5
	33-60	Fine sand	SM, SP-SM	A-2, A-3	0	0	95-100	95-100	50-75	5-30	10-15	NP-4
CYE:												
Coly----------	0-5	Silt loam	CL, CL-ML, ML	A-4, A-6, A-7	0	0	100	100	85-100	85-100	20-45	2-20
	5-60	Silt loam	CL-ML, CL, ML	A-4, A-6	0	0	100	100	85-100	85-100	20-40	2-15
Gg:												
Gibbon---------	0-18	Silt loam	CL-ML, ML, CL	A-4	0	0	100	100	85-100	70-90	20-30	2-10
	18-33	Silt loam	CL	A-6	0	0	100	100	90-100	80-90	25-38	12-20
	33-80	Stratified loamy sand to gravelly coarse sand	CL, ML, SC, SM	A-4	0	0	90-100	75-90	70-95	35-90	10-20	NP-5
Gk:												
Grigston-------	0-12	Silt loam	CL	A-6	0	0	100	100	95-100	80-100	30-35	10-15
	12-42	Stratified loam	ML, CL, CL-ML	A-4, A-6	0	0	100	100	90-100	60-90	20-35	3-15
	42-80	Fine sand	SM, SP, SP-SM	A-1, A-2, A-3	0	0	100	90-100	30-65	3-15	10-20	NP-5
GP:												
Pits----------	0-60	Gravelly sand	SP-SM, SP, SM, GP-GM	A-1, A-2, A-3	---	0-5	45-100	40-100	0-80	0-40	0-14	NP
Ha:												
Hall----------	0-17	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	95-100	25-40	3-18
	17-29	Silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	95-100	35-50	15-30
	29-60	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	95-100	90-100	25-40	5-20
HaA:												
Hall----------	0-13	Silt loam	ML, CL-ML, CL	A-4, A-6	0	0	100	100	95-100	95-100	25-40	3-18
	13-27	Silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	95-100	35-50	15-30
	27-60	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	90-100	25-40	5-20
Hb:												
Hord----------	0-28	Silt loam	CL-ML, ML, CL	A-4, A-6	0	0	100	100	95-100	85-100	20-35	3-18
	28-38	Silt loam	CL	A-4, A-6	0	0	100	100	98-100	85-100	25-40	8-23
	38-60	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	85-100	25-40	6-21
HbA:												
Hord----------	0-28	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	85-100	20-35	3-18
	28-38	Silt loam	CL	A-4, A-6	0	0	100	100	98-100	85-100	25-40	8-23
	38-60	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	85-100	25-40	6-21
HbB:												
Hord----------	0-28	Silt loam	CL-ML, ML, CL	A-4, A-6	0	0	100	100	95-100	85-100	20-35	3-18
	28-38	Silt loam	CL	A-4, A-6	0	0	100	100	98-100	85-100	25-40	8-23
	38-60	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	85-100	25-40	6-21
Hd:												
Hord----------	0-14	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	85-100	20-35	3-18
	14-48	Silt loam	CL	A-4, A-6	0	0	100	100	98-100	85-100	25-40	8-23
	48-60	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	85-100	25-40	6-21
HdA:												
Hord----------	0-14	Silt loam	CL, ML, CL-ML	A-4, A-6	0	0	100	100	95-100	85-100	20-35	3-18
	14-48	Silt loam	CL	A-4, A-6	0	0	100	100	98-100	85-100	25-40	8-23
	48-60	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	100	85-100	25-40	6-21
HoA:												
Holdrege-------	0-13	Silt loam	CL, CL-ML, ML	A-7, A-4, A-6	0	0	100	100	95-100	85-100	20-45	2-20
	13-22	Silty clay loam	CH, CL	A-6, A-7	0	0	100	100	98-100	90-100	30-55	15-35
	22-28	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	95-100	25-40	9-17
	28-60	Silt loam	ML, CL	A-4, A-6	0	0	100	100	95-100	90-100	30-40	5-15

ENGINEERING INDEX PROPERTIES--Continued
Buffalo County, Nebraska

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
HoB:												
Holdrege-------	0-13	Silt loam	CL-ML, ML, CL	A-4, A-6, A-7	0	0	100	100	95-100	85-100	20-45	2-20
	13-22	Silty clay loam	CL, CH	A-6, A-7	0	0	100	100	98-100	90-100	30-55	15-35
	22-28	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	95-100	25-40	9-17
	28-60	Silt loam	ML, CL	A-4, A-6	0	0	100	100	95-100	90-100	30-40	5-15
HoB2:												
Holdrege-------	0-10	Silt loam	CL-ML, ML, CL	A-4, A-6, A-7	0	0	100	100	95-100	85-100	20-45	2-20
	10-22	Silty clay loam	CH, CL	A-6, A-7	0	0	100	100	98-100	90-100	30-55	15-35
	22-60	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	95-100	25-40	9-17
HQ:												
Holdrege-------	0-13	Silt loam	CL-ML, ML, CL	A-4, A-6, A-7	0	0	100	100	95-100	85-100	20-45	2-20
	13-22	Silty clay loam	CH, CL	A-6, A-7	0	0	100	100	98-100	90-100	30-55	15-35
	22-28	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	95-100	25-40	9-17
	28-60	Silt loam	ML, CL	A-4, A-6	0	0	100	100	95-100	90-100	30-40	5-15
Hall-----------	0-17	Silt loam	CL, ML, CL-ML	A-4, A-6	0	0	100	100	95-100	95-100	25-40	3-18
	17-29	Silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	95-100	35-50	15-30
	29-60	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	95-100	90-100	25-40	5-20
In:												
Inavale--------	0-10	Fine sandy loam	SM, CL-ML, ML, SC-SM	A-4	0	0	100	95-100	65-85	35-55	15-20	NP-5
	10-60	Fine sand	SP-SM, SM, SC-SM	A-2, A-3	0	0	100	100	70-90	5-30	15-20	NP-5
KCB:												
Kenesaw--------	0-8	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	95-100	85-100	25-35	5-15
	8-22	Loam	ML, CL-ML, CL	A-4, A-6	0	0	100	100	90-100	85-100	18-35	2-13
	22-60	Silt loam	ML, CL-ML, CL	A-4, A-6	0	0	100	100	95-100	80-100	20-35	2-12
Coly-----------	0-8	Silt loam	CL-ML, CL, ML	A-4, A-6, A-7	0	0	100	100	85-100	85-100	20-45	2-20
	8-60	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	85-100	85-100	20-40	2-15
Ks:												
Kenesaw--------	0-8	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	85-100	25-35	5-15
	8-22	Loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	90-100	85-100	18-35	2-13
	22-60	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	80-100	20-35	2-12
KsA:												
Kenesaw--------	0-8	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	85-100	25-35	5-15
	8-22	Loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	90-100	85-100	18-35	2-13
	22-60	Silt loam	CL, ML, CL-ML	A-4, A-6	0	0	100	100	95-100	80-100	20-35	2-12
KsB:												
Kenesaw--------	0-8	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	95-100	85-100	25-35	5-15
	8-22	Loam	ML, CL-ML, CL	A-4, A-6	0	0	100	100	90-100	85-100	18-35	2-13
	22-60	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	80-100	20-35	2-12
Lex:												
Lex------------	0-9	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	85-100	60-95	22-35	3-15
	9-18	Stratified sandy loam to silty clay loam	CL, CL-ML, ML	A-4, A-6, A-7	0	0	100	100	85-100	60-90	20-45	3-25
	18-24	Fine sandy loam	CL, CL-ML, ML	A-4, A-6	0	0	100	95-100	90-100	60-90	20-35	3-15
	24-60	Gravelly sand	SP, SP-SM, SM	A-1, A-2, A-3	0	0	60-100	50-95	30-65	3-14	15-20	NP-5
Lf:												
Leshara--------	0-9	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-4	0	0	100	100	70-85	40-55	15-25	NP-5
	9-51	Stratified loam to very fine sandy loam	ML, CL-ML, CL	A-4, A-6	0	0	100	100	90-100	60-90	20-35	3-15
	51-60	Coarse sand	SP-SM, SP, SM	A-1, A-2, A-3	0	0	85-100	65-95	30-65	3-15	10-20	NP-5
LG:												
Leshara--------	0-9	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	90-100	60-90	20-35	3-15
	9-51	Stratified loam to very fine sandy loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	90-100	60-90	20-35	3-15
	51-60	Loamy sand	SM, SP, SP-SM	A-1, A-2, A-3	0	0	85-100	65-95	30-65	3-15	10-20	NP-5
Gibbon---------	0-21	Silt loam	CL, CL-ML, ML	A-4	0	0	100	100	85-100	70-90	20-30	2-10
	21-33	Silt loam	CL	A-6	0	0	100	100	90-100	80-90	25-38	12-20
	33-60	Stratified very fine sandy loam to silt loam	CL, ML, SM, SC	A-4	0	0	100	100	70-95	35-90	15-25	NP-8
Lm:												
Loup-----------	0-10	Loam	CL-ML, CL, ML	A-4, A-6	0	0	100	100	80-100	40-80	15-35	NP-15
	10-24	Loamy fine sand	SP-SM, SM	A-2, A-3	0	0	100	100	65-100	5-20	10-20	NP-5
	24-60	Fine sand	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0	100	100	70-90	30-70	15-25	NP-10
Lx:												
Gothenburg-----	0-11	Stratified loam to fine sandy loam	CL-ML, ML	A-4	0	0	100	95-100	60-100	50-90	20-35	2-10
	11-80	Stratified coarse sand to gravelly coarse sand	SP, SP-SM, SM	A-1, A-2, A-3	0	0	70-100	50-95	25-65	0-15	0-20	NP
M:												
Fluvaquents----	0-60	Stratified sandy loam to loamy fine sand	SM, SP-SM	A-2, A-3	0	0	100	90-100	65-100	5-20	10-20	NP-5
M-W:												
Miscellaneous Water---------	---	---	---	---	---	---	---	---	---	---	---	---

ENGINEERING INDEX PROPERTIES--Continued
Buffalo County, Nebraska

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
OrC:												
Anselmo--------	0-14	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0	100	100	60-100	30-65	15-25	NP-7
	14-46	Loamy fine sand	SM, SP-SM, SC-SM	A-2, A-3	0	0	100	100	70-90	5-30	15-20	NP-5
	46-53	Fine sandy loam	SC-SM, SM	A-4	0	0	100	100	70-85	40-50	15-25	NP-7
	53-60	Silt loam	CL, ML, CL-ML	A-4, A-6	0	0	100	100	95-100	80-100	20-35	2-12
P:												
Platte---------	0-8	Sandy loam	SM, SC, ML, CL	A-2, A-4, A-6	0	0	100	95-100	60-85	30-55	20-35	3-15
	8-17	Fine sandy loam, loamy fine sand	SM, SC-SM, CL-ML, ML	A-4	0	0	100	95-100	75-95	45-75	10-20	NP-5
	17-60	Gravelly coarse sand, gravelly sand	SP-SM, SM	A-1, A-2, A-3	0	0	70-100	50-95	25-65	0-15	10-20	NP-5
PL:												
Platte---------	0-8	Sandy loam	CL, ML, SC, SM	A-2, A-4, A-6	0	0	100	95-100	60-85	30-55	20-35	3-15
	8-17	Fine sandy loam, loamy fine sand	CL-ML, ML, SC-SM, SM	A-4	0	0	100	95-100	75-95	45-75	10-20	NP-5
	17-60	Gravelly sand	SM, SP-SM	A-1, A-2, A-3	0	0	70-100	50-95	25-65	0-15	10-20	NP-5
Alda-----------	0-8	Fine sandy loam	SM, SC-SM	A-2, A-4	0	0	90-100	85-100	70-100	30-50	15-20	NP-5
	8-26	Fine sandy loam	SM, SC-SM	A-2, A-4	0	0	95-100	95-100	70-100	30-50	15-26	NP-7
	26-60	Gravelly sand	SP-SM, SP, SM, SC-SM	A-1, A-2, A-3	0	0	70-100	65-95	30-95	2-15	15-20	NP-5
RB:												
Coly-----------	0-3	Silt loam	ML, CL, CL-ML	A-4, A-6, A-7	0	0	100	100	85-100	85-100	20-45	2-20
	3-60	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	85-100	85-100	20-40	2-15
Ru:												
Rusco----------	0-10	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	95-100	85-100	60-100	20-40	3-15
	10-18	Silty clay loam	CL	A-6, A-7	0	0	100	100	90-100	85-100	30-45	15-30
	18-60	Loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	90-100	70-100	20-35	3-15
Rw:												
Riverwash------	0-3	Sand	SM, SP-SM	A-2, A-3	0	0	100	90-100	65-80	5-35	15-20	NP
	3-60	Stratified very gravelly coarse sand to sand	GP, GW, SP, SW	A-1	0	0-10	50-100	30-90	20-80	3-15	---	NP
Sc:												
Scott----------	0-9	Silt loam	CL, CL-ML, ML	A-4, A-6, A-7	0	0	100	100	100	95-100	20-45	2-20
	9-42	Silty clay	CL, CH	A-7	0	0	100	100	100	95-100	41-75	20-45
	42-52	Silty clay loam	CH, CL	A-6, A-7	0	0	100	100	100	95-100	35-60	20-40
	52-60	Silt loam	CL	A-4, A-6, A-7	0	0	100	100	90-100	90-100	25-50	8-24
SdA:												
Simeon---------	0-9	Sandy loam	SM	A-2, A-4	0	0	95-100	90-100	60-85	30-40	10-20	NP-5
	9-60	Sand	SM, SP, SP-SM	A-1, A-2, A-3	0	0	90-100	80-100	35-95	0-30	10-20	NP-5
Slc:												
Silver Creek---	0-10	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	95-100	25-40	7-15
	10-27	Silty clay	CH, CL	A-7	0	0	100	100	95-100	95-100	40-60	25-35
	27-38	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	95-100	25-40	7-15
	38-42	Fine sandy loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	100	100	70-85	40-55	22-40	4-15
	42-60	Loamy fine sand, fine sand	SM	A-2	0	0	100	100	55-80	20-35	15-20	NP-5
Sx:												
Bolent---------	0-5	Fine sand	SC-SM, SM, SP, SP-SM	A-2, A-3	0	0	95-100	90-100	50-100	3-25	15-20	NP-5
	5-60	Stratified sand to fine sandy loam	SP-SM, SC-SM, SM, SP	A-1, A-2, A-3	0	0	95-100	90-100	40-70	3-35	10-20	NP-5
TsA:												
Dunday---------	0-25	Fine sandy loam	SM, SC-SM	A-4	0	0	100	100	70-85	40-50	15-25	NP-5
	25-60	Fine sand	SC-SM, SM, SP-SM	A-2, A-3	0	0	100	100	50-95	5-35	15-25	NP-5
TXA:												
Dunday---------	0-25	Loamy fine sand	SM, SC-SM	A-2	0	0	100	100	90-100	13-35	15-25	NP-5
	25-60	Fine sand	SC-SM, SP-SM, SM	A-2, A-3	0	0	100	100	50-95	5-35	15-25	NP-5
Valentine------	0-5	Loamy fine sand	SP-SM, SP, SM	A-2, A-3	0	0	100	100	95-100	2-35	15-20	NP-5
	5-60	Fine sand	SM, SP, SP-SM	A-2, A-3	0	0	100	100	70-100	2-25	15-20	NP-5
TXB:												
Dunday---------	0-25	Loamy fine sand	SC-SM, SM	A-2	0	0	100	100	90-100	13-35	15-25	NP-5
	25-60	Fine sand	SP-SM, SC-SM, SM	A-2, A-3	0	0	100	100	50-95	5-35	15-25	NP-5
Valentine------	0-5	Loamy fine sand	SP, SM, SP-SM	A-2, A-3	0	0	100	100	95-100	2-35	15-20	NP-5
	5-60	Fine sand	SM, SP, SP-SM	A-2, A-3	0	0	100	100	70-100	2-25	15-20	NP-5
TYA:												
Dunday---------	0-25	Loamy fine sand	SC-SM, SM	A-2	0	0	100	100	90-100	13-35	15-25	NP-5
	25-60	Fine sand	SP-SM, SM, SC-SM	A-2, A-3	0	0	100	100	50-95	5-35	15-25	NP-5
Valentine------	0-5	Loamy fine sand	SP, SP-SM, SM	A-2, A-3	0	0	100	100	95-100	2-35	15-20	NP-5
	5-60	Fine sand	SP-SM, SP, SM	A-2, A-3	0	0	100	100	70-100	2-25	15-20	NP-5

ENGINEERING INDEX PROPERTIES--Continued
Buffalo County, Nebraska

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
UHC:												
Uly----------	0-8	Silt loam	ML, CL	A-4, A-6	0	0	100	100	100	95-100	20-40	2-20
	8-14	Silt loam	CL, ML	A-4, A-6	0	0	100	100	100	95-100	25-40	3-15
	14-60	Silt loam	CL, ML	A-4, A-6	0	0	100	100	100	95-100	25-40	3-15
Holdrege-------	0-13	Silt loam	CL, CL-ML, ML	A-4, A-6, A-7	0	0	100	100	95-100	85-100	20-45	2-20
	13-22	Silty clay loam	CL, CH	A-6, A-7	0	0	100	100	98-100	90-100	30-55	15-35
	22-28	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	95-100	25-40	9-17
	28-60	Silt loam	ML, CL	A-4, A-6	0	0	100	100	95-100	90-100	30-40	5-15
UHC2:												
Uly----------	0-8	Silt loam	ML, CL	A-4, A-6	0	0	100	100	100	95-100	20-40	2-20
	8-14	Silt loam	ML, CL	A-4, A-6	0	0	100	100	100	95-100	25-40	3-15
	14-60	Silt loam	ML, CL	A-4, A-6	0	0	100	100	100	95-100	25-40	3-15
Holdrege-------	0-10	Silt loam	CL, CL-ML, ML	A-4, A-6, A-7	0	0	100	100	95-100	85-100	20-45	2-20
	10-22	Silty clay loam	CL, CH	A-6, A-7	0	0	100	100	98-100	90-100	30-55	15-35
	22-28	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	95-100	25-40	9-17
	28-60	Silt loam	CL, ML	A-4, A-6	0	0	100	100	95-100	90-100	30-40	5-15
Coly----------	0-8	Silt loam	CL, ML, CL-ML	A-4, A-6, A-7	0	0	100	100	85-100	85-100	20-45	2-20
	8-60	Silt loam	ML, CL-ML, CL	A-4, A-6	0	0	100	100	85-100	85-100	20-40	2-15
UsD:												
Uly----------	0-8	Silt loam	ML, CL	A-4, A-6	0	0	100	100	100	95-100	20-40	2-20
	8-14	Silt loam	ML, CL	A-4, A-6	0	0	100	100	100	95-100	25-40	3-15
	14-60	Silt loam	CL, ML	A-4, A-6	0	0	100	100	100	95-100	25-40	3-15
VbC:												
Valentine------	0-5	Loamy fine sand	SP-SM, SM, SP	A-2, A-3	0	0	100	100	95-100	2-35	15-20	NP-5
	5-60	Fine sand	SP, SM, SP-SM	A-2, A-3	0	0	100	100	70-100	2-25	15-20	NP-5
W:												
Water----------	---	---	---	---	---	---	---	---	---	---	---	---
Wb:												
Wann----------	0-13	Fine sandy loam	SM, SC-SM	A-2, A-4	0	0	95-100	95-100	70-100	30-50	15-25	NP-5
	13-60	Fine sandy loam	SM, SC-SM	A-2, A-4	0	0	95-100	75-100	60-100	20-50	15-25	NP-5
Wm:												
Wann----------	0-13	Loam	ML, CL-ML, CL	A-4, A-6	0	0	95-100	95-100	85-100	55-75	15-30	2-15
	13-60	Fine sandy loam	SC-SM, SM	A-2, A-4	0	0	95-100	75-100	60-100	20-50	15-25	NP-5
Wr:												
Wood River-----	0-11	Silt loam	CL-ML, CL, ML	A-4, A-6	0	0	100	100	95-100	95-100	20-40	3-15
	11-36	Silty clay loam	CL, CH	A-7	0	0	100	100	95-100	95-100	45-65	30-40
	36-60	Silt loam	CL-ML, CL, CH	A-4, A-6, A-7	0	0	100	100	95-100	95-100	20-60	5-40
WrA:												
Wood River-----	0-11	Silt loam	ML, CL-ML, CL	A-4, A-6	0	0	100	100	95-100	95-100	20-40	3-15
	11-36	Silty clay	CL, CH	A-7	0	0	100	100	95-100	95-100	45-65	30-40
	36-60	Silt loam	CL-ML, CL, CH	A-4, A-6, A-7	0	0	100	100	95-100	95-100	20-60	5-40
WS:												
Wood River-----	0-11	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	95-100	20-40	3-15
	11-36	Silty clay loam	CL, CH	A-7	0	0	100	100	95-100	95-100	45-65	30-40
	36-60	Silt loam	CH, CL, CL-ML	A-4, A-6, A-7	0	0	100	100	95-100	95-100	20-60	5-40
Gayville Varian	0-16	Silt loam	CL-ML, ML, CL	A-4	0	0	100	100	95-100	90-100	20-30	2-10
	16-30	Clay loam	CL	A-6, A-7	0	0	100	100	90-100	70-90	30-45	11-20
	30-60	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	90-100	25-35	3-12
Wx:												
Barney---------	0-4	Silt loam	CL	A-6	0	0	100	95-100	90-100	70-95	25-40	12-20
	4-60	Gravelly coarse sand	SP-SM, SP, SM, SC-SM	A-1, A-2, A-3	0	0	70-100	50-95	25-65	0-15	0-10	NP-5

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Physical Properties

This table shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In this table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Saturated hydraulic conductivity refers to the ability of a soil to transmit water or air. The term "permeability," as used in soil surveys, indicates saturated hydraulic conductivity (K-sat). The estimates in the table indicate the rate of water movement, in micrometers per second (um/sec), when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in this table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are as follows:

1. Coarse sands, sands, fine sands, and very fine sands.

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(Single entries under "Sand and Silt" are a representative percentage are calculated using an algorithm. Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer)

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										K	Kf	T		
	In	Pct	Pct	Pct	g/cc	in/hr	In/in	Pct	Pct					

2. Loamy coarse sands, loamy sands, loamy fine sands, loamy very fine sands, ash material, and sapric soil material.

3. Coarse sandy loams, sandy loams, fine sandy loams, and very fine sandy loams.

4L. Calcareous loams, silt loams, clay loams, and silty clay loams.

4. Clays, silty clays, noncalcareous clay loams, and silty clay loams that are more than 35 percent clay.

5. Noncalcareous loams and silt loams that are less than 20 percent clay and sandy clay loams, sandy clays, and hemic soil material.

6. Noncalcareous loams and silt loams that are more than 20 percent clay and noncalcareous clay loams that are less than 35 percent clay.

7. Silts, noncalcareous silty clay loams that are less than 35 percent clay, and fibric soil material.

8. Soils that are not subject to wind erosion because of coarse fragments on the surface or because of surface wetness.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

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Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										K	Kf	T		
	In	Pct	Pct	Pct	g/cc	in/hr	In/in	Pct	Pct					
2Gg:														
Gibbon-------	0-9	12	70	10-27	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	1.0-3.0	.32	.32	5	4L	86
	9-40	9	65	20-32	1.20-1.30	0.60-2.00	0.22-0.24	3.0-5.9	0.5-1.0	.43	.43			
	40-80	8	56	30-43	1.35-1.50	0.20-0.60	0.12-0.18	3.0-5.9	0.0-0.5	.43	.43			
2Hb:														
Hobbs--------	0-28	11	68	15-27	1.20-1.40	0.60-2.00	0.21-0.24	0.0-2.9	2.0-4.0	.32	.32	5	6	48
	28-60	11	68	15-27	1.20-1.40	0.60-2.00	0.18-0.20	0.0-2.9	0.5-1.0	.32	.32			
2Kt:														
Cozad--------	0-12	66	20	11-18	1.40-1.50	2.00-6.00	0.16-0.18	0.0-2.9	1.0-2.0	.20	.20	5	3	86
	12-58	45	41	10-18	1.30-1.40	0.60-2.00	0.17-0.19	0.0-2.9	0.5-1.0	.37	.37			
	58-60	66	20	11-18	1.40-1.50	2.00-6.00	0.15-0.17	0.0-2.9	0.5-1.0	.28	.28			
2Or:														
Anselmo------	0-17	66	20	10-18	1.30-1.60	2.00-5.95	0.16-0.18	0.0-2.9	1.0-2.0	.24	.24	5	3	86
	17-46	87	6	3-10	1.50-1.60	5.95-19.98	0.09-0.11	0.0-2.9	0.0-0.5	.17	.17			
	46-53	66	20	10-18	1.40-1.60	2.00-6.00	0.12-0.16	0.0-2.9	0.5-1.0	.28	.28			
	53-60	14	73	8-18	1.30-1.40	0.60-2.00	0.19-0.22	0.0-2.9	0.0-0.5	.37	.37			
2OrB2:														
Anselmo------	0-17	66	20	10-18	1.30-1.60	2.00-5.95	0.16-0.18	0.0-2.9	1.0-2.0	.24	.24	5	3	86
	17-46	87	6	3-10	1.50-1.60	5.95-19.98	0.09-0.11	0.0-2.9	0.0-0.5	.17	.17			
	46-53	66	20	10-18	1.40-1.60	2.00-6.00	0.12-0.16	0.0-2.9	0.5-1.0	.28	.28			
	53-60	14	73	8-18	1.30-1.40	0.60-2.00	0.19-0.22	0.0-2.9	0.0-0.5	.37	.37			
2Sc:														
Scott--------	0-9	26	53	15-27	1.25-1.40	0.60-2.00	0.21-0.24	0.0-2.9	2.0-4.0	.37	.37	3	6	48
	9-42	6	47	40-55	1.20-1.40	0.00-0.06	0.08-0.16	6.0-8.9	1.0-2.0	.37	.37			
	42-52	19	48	27-40	1.15-1.40	0.20-0.60	0.18-0.20	6.0-8.9	0.5-1.0	.43	.43			
	52-60	24	50	18-35	1.30-1.50	0.60-2.00	0.14-0.22	3.0-5.9	0.5-1.0	.43	.43			
2TXA:														
Dunday-------	0-11	87	7	3-10	1.40-1.60	5.95-19.98	0.10-0.12	0.0-2.9	1.0-2.0	.17	.17	5	2	134
	11-60	95	1	2-7	1.50-1.70	5.95-19.98	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Valentine----	0-5	87	7	2-10	1.35-1.55	5.95-19.98	0.10-0.12	0.0-2.9	0.5-1.0	.17	.17	5	2	134
	5-30	87	7	2-10	1.55-1.75	5.95-19.98	0.09-0.11	0.0-2.9	0.0-0.5	.17	.17			
	30-60	96	1	0-6	1.60-1.80	5.95-19.98	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
AED:														
Arents, Earthen Dam-	---			---	---	---	---	---	---	---	---	-	---	---
Ax:														
Alda---------	0-8	65	27	5-12	1.40-1.60	2.00-6.00	0.16-0.18	0.0-2.9	2.0-4.0	.20	.20	4	3	86
	8-26	66	28	3-10	1.40-1.60	2.00-6.00	0.15-0.17	0.0-2.9	0.5-1.0	.20	.20			
	26-80	98	2	0-2	1.50-1.70	19.98-19.98	0.02-0.04	0.0-2.9	0.0-0.5	.10	.15			
Ay:														
Alda---------	0-8	43	38	12-25	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	2.0-4.0	.28	.28	4	5	56
	8-26	66	28	3-10	1.40-1.60	2.00-6.00	0.15-0.17	0.0-2.9	0.5-1.0	.20	.20			
	26-80	98	2	0-2	1.50-1.70	19.98-19.98	0.02-0.04	0.0-2.9	0.0-0.5	.10	.15			
Bdn:														
Blendon------	0-26	66	20	10-18	1.25-1.35	2.00-6.00	0.11-0.17	0.0-2.9	2.0-4.0	.20	.20	5	3	86
	26-36	67	20	10-15	1.25-1.35	2.00-6.00	0.09-0.15	0.0-2.9	0.5-1.0	.20	.20			
	36-42	85	26	3-18	1.30-1.45	1.98-19.98	0.08-0.15	0.0-2.9	0.0-0.5	.24	.24			
	42-80	98	2	0-2	1.50-1.70	19.98-19.98	0.02-0.04	0.0-2.9	0.0-0.5	.10	.15			
BdnA:														
Anselmo------	0-14	66	20	10-18	1.30-1.60	0.57-5.95	0.13-0.18	0.0-2.9	1.0-2.0	.20	.20	5	3	86
	14-26	66	20	10-18	1.40-1.60	2.00-6.00	0.15-0.19	0.0-2.9	0.5-1.0	.20	.20			
	26-36	66	20	10-18	1.40-1.60	2.00-6.00	0.12-0.16	0.0-2.9	0.5-1.0	.24	.24			
	36-80	86	7	5-10	1.50-1.75	5.95-19.98	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Bed:														
Blendon------	0-17	42	38	15-25	1.20-1.30	0.60-2.00	0.18-0.20	0.0-2.9	2.0-4.0	.28	.28	5	5	56
	17-26	65	20	10-20	1.20-1.30	0.57-5.95	0.11-0.18	0.0-2.9	1.0-2.0	.20	.20			
	26-36	67	20	10-15	1.25-1.35	2.00-6.00	0.09-0.15	0.0-2.9	0.5-1.0	.20	.20			
	42-80	98	2	0-2	1.50-1.70	19.98-19.98	0.02-0.04	0.0-2.9	0.0-0.5	.10	.15			
BedA:														
Anselmo------	0-14	44	40	12-20	1.30-1.40	0.57-5.95	0.20-0.22	0.0-2.9	1.0-2.0	.28	.28	5	5	56
	14-26	66	20	10-18	1.40-1.60	2.00-6.00	0.15-0.19	0.0-2.9	0.5-1.0	.20	.20			
	26-36	66	20	10-18	1.40-1.60	2.00-6.00	0.12-0.16	0.0-2.9	0.5-1.0	.24	.24			
	36-80	86	7	5-10	1.50-1.75	5.95-19.98	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Bob:														
Boel---------	0-14	67	20	8-18	1.50-1.70	2.00-6.00	0.16-0.18	0.0-2.9	1.0-2.0	.20	.20	3	3	86
	14-80	96	1	0-6	1.50-1.60	5.95-19.98	0.05-0.10	0.0-2.9	0.0-0.5	.20	.20			
Boc:														
Boel---------	0-14	42	38	15-25	1.30-1.40	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.28	.28	3	4L	86
	14-80	96	1	0-6	1.50-1.60	5.95-19.98	0.05-0.10	0.0-2.9	0.0-0.5	.20	.20			
By:														
Coly---------	0-4	11	68	18-24	1.30-1.50	0.60-2.00	0.20-0.24	0.0-2.9	1.0-2.0	.43	.43	5	4L	86
	4-60	11	68	18-24	1.30-1.50	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
Hobbs--------	0-28	11	68	15-27	1.20-1.40	0.60-2.00	0.21-0.24	0.0-2.9	2.0-4.0	.32	.32	5	6	48
	28-60	10	68	15-30	1.20-1.40	0.60-2.00	0.18-0.22	0.0-2.9	0.5-1.0	.43	.43			
CbC:														
Coly---------	0-8	11	68	18-24	1.30-1.50	0.60-2.00	0.20-0.24	0.0-2.9	1.0-2.0	.43	.43	5	4L	86
	8-80	11	68	18-24	1.30-1.50	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
CbE:														
Coly---------	0-8	11	68	18-24	1.30-1.50	0.60-2.00	0.20-0.24	0.0-2.9	1.0-2.0	.43	.43	5	4L	86
	8-80	11	68	18-24	1.30-1.50	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
Cm:														
Cass---------	0-17	44	41	10-20	1.20-1.40	0.60-2.00	0.20-0.22	0.0-2.9	1.0-3.0	.28	.28	5	5	56
	17-33	64	26	5-15	1.40-1.60	2.00-6.00	0.15-0.17	0.0-2.9	0.5-1.0	.20	.20			
	33-80	93	1	2-10	1.50-1.70	5.95-19.98	0.08-0.10	0.0-2.9	0.0-0.5	.20	.20			

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(Single entries under "Sand and Silt" are a representative percentage are calculated using an algorithm. Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer)

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										K	Kf	T		
	In	Pct	Pct	Pct	g/cc	in/hr	In/in	Pct	Pct					
Coz:														
Cozad--------	0-18	12	70	11-25	1.30-1.40	0.60-2.00	0.20-0.22	0.0-2.9	1.0-2.0	.32	.32	5	6	48
	18-48	42	44	10-18	1.30-1.40	0.60-2.00	0.17-0.19	0.0-2.9	0.5-1.0	.43	.43			
	48-80	41	46	8-18	1.20-1.50	0.60-2.00	0.15-0.19	0.0-2.9	0.0-0.5	.24	.24			
CozA:														
Cozad--------	0-18	12	70	11-25	1.30-1.40	0.60-2.00	0.20-0.22	0.0-2.9	1.0-2.0	.32	.32	5	6	48
	18-48	42	44	10-18	1.30-1.40	0.60-2.00	0.17-0.19	0.0-2.9	0.5-1.0	.43	.43			
	48-80	41	46	8-18	1.20-1.50	0.60-2.00	0.15-0.19	0.0-2.9	0.0-0.5	.24	.24			
CozB2:														
Cozad--------	0-7	12	70	11-25	1.30-1.40	0.60-2.00	0.20-0.22	0.0-2.9	1.0-2.0	.32	.32	5	6	48
	7-38	42	44	10-18	1.30-1.40	0.60-2.00	0.17-0.19	0.0-2.9	0.5-1.0	.43	.43			
	38-80	41	46	8-18	1.20-1.50	0.60-2.00	0.15-0.19	0.0-2.9	0.0-0.5	.24	.24			
CozC2:														
Cozad--------	0-5	12	70	11-25	1.30-1.40	0.60-2.00	0.20-0.22	0.0-2.9	1.0-2.0	.32	.32	5	6	48
	5-40	14	72	10-18	1.30-1.40	0.60-2.00	0.17-0.19	0.0-2.9	0.5-1.0	.43	.43			
	40-80	43	44	8-18	1.25-1.50	0.60-2.00	0.15-0.19	0.0-2.9	0.0-0.5	.24	.24			
Cs:														
Cass---------	0-11	68	20	7-17	1.40-1.60	2.00-6.00	0.16-0.18	0.0-2.9	1.0-2.0	.20	.20	5	3	86
	11-33	64	26	5-15	1.40-1.60	2.00-6.00	0.15-0.17	0.0-2.9	0.5-1.0	.20	.20			
	33-60	93	1	2-10	1.50-1.70	5.95-19.98	0.08-0.10	0.0-2.9	0.0-0.5	.20	.20			
CYE:														
Coly---------	0-5	11	68	18-24	1.30-1.50	0.60-2.00	0.20-0.24	0.0-2.9	1.0-2.0	.43	.43	5	4L	86
	5-60	11	68	18-24	1.30-1.50	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
Gg:														
Gibbon-------	0-18	10	68	20-25	1.40-1.60	0.60-2.00	0.21-0.23	0.0-2.9	2.0-4.0	.32	.32	5	4L	86
	18-33	9	67	20-27	1.30-1.50	0.60-2.00	0.18-0.22	0.0-2.9	0.5-1.0	.32	.32			
	33-80	92	4	0-7	1.50-1.70	6.00-19.98	0.02-0.04	0.0-2.9	0.0-0.5	.10	.15			
Gk:														
Grigston-----	0-12	9	67	21-26	1.30-1.40	0.60-2.00	0.21-0.24	0.0-2.9	2.0-4.0	.32	.32	5	6	48
	12-42	38	43	12-27	1.30-1.50	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	.43	.43			
	42-80	92	4	0-8	1.70-1.90	5.95-19.98	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10			
GP:														
Pits---------	0-60	95	1	0-8	1.70-2.00	6.00-20.00	0.02-0.09	0.0-2.9	0.0-0.5	.10	.17	2	8	0
Ha:														
Hall---------	0-17	11	68	15-27	1.30-1.40	0.60-2.00	0.20-0.24	0.0-2.9	2.0-4.0	.32	.32	5	6	48
	17-29	7	65	20-35	1.30-1.50	0.20-0.60	0.18-0.20	3.0-5.9	1.0-2.0	.43	.43			
	29-60	10	68	15-30	1.30-1.40	0.60-2.00	0.18-0.22	0.0-2.9	0.5-1.0	.43	.43			
HaA:														
Hall---------	0-13	11	68	15-27	1.30-1.40	0.60-2.00	0.20-0.24	0.0-2.9	2.0-4.0	.32	.32	5	6	48
	13-27	7	65	20-35	1.30-1.50	0.20-0.60	0.18-0.20	3.0-5.9	1.0-2.0	.43	.43			
	27-60	10	68	15-30	1.30-1.40	0.60-2.00	0.18-0.22	0.0-2.9	0.5-1.0	.43	.43			
Hb:														
Hord---------	0-28	11	67	17-27	1.30-1.40	0.60-2.00	0.20-0.24	0.0-2.9	2.0-4.0	.32	.32	5	6	48
	28-38	9	69	20-27	1.35-1.45	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
	38-60	9	67	18-30	1.30-1.50	0.60-2.00	0.17-0.22	0.0-2.9	0.0-0.5	.43	.43			
HbA:														
Hord---------	0-28	11	67	17-27	1.30-1.40	0.60-2.00	0.20-0.24	0.0-2.9	2.0-4.0	.32	.32	5	6	48
	28-38	9	69	20-35	1.35-1.45	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
	38-60	9	67	18-30	1.30-1.50	0.60-2.00	0.17-0.22	0.0-2.9	0.0-0.5	.43	.43			
HbB:														
Hord---------	0-28	11	67	17-27	1.30-1.40	0.60-2.00	0.20-0.24	0.0-2.9	2.0-4.0	.32	.32	5	6	48
	28-38	9	69	20-35	1.35-1.45	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
	38-60	9	67	18-30	1.30-1.50	0.60-2.00	0.17-0.22	0.0-2.9	0.0-0.5	.43	.43			
Hd:														
Hord---------	0-14	11	67	17-27	1.30-1.40	0.60-2.00	0.20-0.24	0.0-2.9	2.0-4.0	.32	.32	5	6	48
	14-48	9	69	20-35	1.35-1.45	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
	48-60	9	67	18-30	1.30-1.50	0.60-2.00	0.17-0.22	0.0-2.9	0.0-0.5	.43	.43			
HdA:														
Hord---------	0-14	11	67	17-27	1.30-1.40	0.60-2.00	0.20-0.24	0.0-2.9	2.0-4.0	.32	.32	5	6	48
	14-48	9	69	20-35	1.35-1.45	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
	48-60	9	67	18-30	1.30-1.50	0.60-2.00	0.17-0.22	0.0-2.9	0.0-0.5	.43	.43			
HoA:														
Holdrege-----	0-13	9	67	20-27	1.40-1.60	0.60-2.00	0.22-0.24	3.0-5.9	2.0-4.0	.32	.32	5	6	48
	13-22	7	62	28-35	1.20-1.40	0.60-2.00	0.18-0.20	3.0-5.9	0.5-2.0	.43	.43			
	22-28	9	67	18-30	1.30-1.50	0.60-2.00	0.17-0.20	3.0-5.9	0.0-0.5	.43	.43			
	28-60	14	69	15-20	1.40-1.60	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	.43	.43			
HoB:														
Holdrege-----	0-13	9	67	20-27	1.40-1.60	0.60-2.00	0.22-0.24	3.0-5.9	2.0-4.0	.32	.32	5	6	48
	13-22	7	62	28-35	1.20-1.40	0.60-2.00	0.18-0.20	3.0-5.9	0.5-2.0	.43	.43			
	22-28	9	67	18-30	1.30-1.50	0.60-2.00	0.17-0.20	3.0-5.9	0.0-0.5	.43	.43			
	28-60	14	69	15-20	1.40-1.60	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	.43	.43			
HoB2:														
Holdrege-----	0-10	9	67	20-27	1.40-1.60	0.60-2.00	0.22-0.24	3.0-5.9	2.0-4.0	.32	.32	5	6	48
	10-22	7	62	28-35	1.20-1.40	0.60-2.00	0.18-0.20	3.0-5.9	0.5-2.0	.43	.43			
	22-60	9	67	18-30	1.30-1.50	0.60-2.00	0.17-0.20	3.0-5.9	0.0-0.5	.43	.43			
HQ:														
Holdrege-----	0-13	9	67	20-27	1.40-1.60	0.60-2.00	0.22-0.24	3.0-5.9	2.0-4.0	.32	.32	5	6	48
	13-22	7	62	28-35	1.20-1.40	0.60-2.00	0.18-0.20	3.0-5.9	0.5-2.0	.43	.43			
	22-28	9	67	18-30	1.30-1.50	0.60-2.00	0.17-0.20	3.0-5.9	0.0-0.5	.43	.43			
	28-60	14	69	15-20	1.40-1.60	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	.43	.43			
Hall---------	0-17	11	68	15-27	1.30-1.40	0.60-2.00	0.20-0.24	3.0-5.9	2.0-4.0	.32	.32	5	6	48
	17-29	7	65	20-35	1.30-1.50	0.60-2.00	0.18-0.20	3.0-5.9	1.0-2.0	.43	.43			
	29-60	10	68	15-30	1.30-1.40	0.60-2.00	0.18-0.22	3.0-5.9	0.5-1.0	.43	.43			

PHYSICAL PROPERTIES OF THE SOILS
Buffalo County, Nebraska: Out-of-date

(Single entries under "Sand and Silt" are a representative percentage are calculated using an algorithm. Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer)

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										K	Kf	T		
	In	Pct	Pct	Pct	g/cc	in/hr	In/in	Pct	Pct					
In:														
Inavale------	0-10	63	26	7-15	1.40-1.50	2.00-6.00	0.13-0.18	0.0-2.9	0.5-1.0	.24	.24	5	3	86
	10-60	87	6	3-10	1.50-1.60	5.95-19.98	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15			
KCB:														
Kenesaw------	0-8	11	67	18-25	1.20-1.40	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.32	.32	5	6	48
	8-22	42	43	10-20	1.20-1.30	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
	22-60	14	73	8-18	1.30-1.40	0.60-2.00	0.17-0.22	0.0-2.9	0.0-0.5	.43	.43			
Coly---------	0-8	11	68	18-24	1.30-1.50	0.60-2.00	0.20-0.24	0.0-2.9	1.0-2.0	.43	.43	5	4L	86
	8-60	11	68	18-24	1.30-1.50	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
Ks:														
Kenesaw------	0-8	11	67	18-25	1.20-1.40	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.32	.32	5	6	48
	8-22	42	43	10-20	1.20-1.30	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
	22-60	14	73	8-18	1.30-1.40	0.60-2.00	0.17-0.22	0.0-2.9	0.0-0.5	.43	.43			
KsA:														
Kenesaw------	0-8	11	67	18-25	1.20-1.40	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.32	.32	5	6	48
	8-22	42	43	10-20	1.20-1.30	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
	22-60	14	73	8-18	1.30-1.40	0.60-2.00	0.17-0.22	0.0-2.9	0.0-0.5	.43	.43			
KsB:														
Kenesaw------	0-8	11	67	18-25	1.20-1.40	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.32	.32	5	6	48
	8-22	42	43	10-20	1.20-1.30	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
	22-60	14	73	8-18	1.30-1.40	0.60-2.00	0.17-0.22	0.0-2.9	0.0-0.5	.43	.43			
Lex:														
Lex----------	0-9	26	53	15-27	1.20-1.45	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.32	.32	4	4L	86
	9-18	10	62	18-32	1.30-1.70	0.20-0.60	0.15-0.22	3.0-5.9	0.5-1.0	.37	.37			
	18-24	60	30	5-18	1.30-1.50	2.00-6.00	0.12-0.14	0.0-2.9	0.5-1.0	.28	.28			
	24-60	95	2	2-5	1.50-1.70	19.98-19.98	0.02-0.06	0.0-2.9	0.0-0.5	.05	.10			
Lf:														
Leshara------	0-9	63	26	7-15	1.50-1.70	2.00-6.00	0.16-0.18	0.0-2.9	1.0-3.0	.20	.20	5	3	86
	9-51	38	43	12-27	1.30-1.50	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	.43	.43			
	51-60	92	4	0-8	1.70-1.90	5.95-19.98	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10			
LG:														
Gibbon-------	0-21	10	68	20-25	1.40-1.60	0.60-2.00	0.21-0.23	0.0-2.9	2.0-4.0	.32	.32	5	4L	86
	21-33	9	67	20-27	1.30-1.50	0.60-2.00	0.18-0.22	3.0-5.9	0.5-1.0	.32	.32			
	33-60			15-25	1.50-1.70	0.57-5.95	0.16-0.20	0.0-2.9	0.5-1.0	.32	.32			
Leshara------	0-9	11	68	15-27	1.30-1.50	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.32	.32	5	6	48
	9-51	12	69	12-27	1.30-1.50	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	.43	.43			
	51-60	92	4	0-8	1.70-1.90	5.95-19.98	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10			
Lm:														
Loup---------	0-10	45	42	8-18	1.10-1.30	0.60-2.00	0.20-0.22	0.0-2.9	4.0-8.0	.24	.24	3	8	0
	10-24	79	16	2-7	1.50-1.70	5.95-19.98	0.06-0.08	0.0-2.9	0.5-1.0	.17	.17			
	24-60	85	10	1-12	1.30-1.40	6.00-20.00	0.15-0.17	0.0-2.9	0.0-0.5	.15	.15			
Lx:														
Gothenburg---	0-11	47	45	5-12	1.40-1.50	0.60-2.00	0.18-0.22	0.0-2.9	0.5-1.0	.32	.32	5	8	0
	11-80	95	4	0-3	1.55-1.70	19.98-19.98	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
M:														
Fluvaquents--	0-60	79	16	2-7	1.50-1.70	5.95-19.98	0.06-0.08	0.0-2.9	0.5-1.0	.17	.17	5	8	0
M-W:														
Miscellaneous Water-------	---			---	---	---	---	---	---	---	---	-	---	---
OrC:														
Anselmo------	0-14	66	20	10-18	1.30-1.60	2.00-5.95	0.16-0.18	0.0-2.9	1.0-2.0	.24	.24	5	3	86
	14-46	87	6	3-10	1.50-1.60	5.95-19.98	0.09-0.11	0.0-2.9	0.0-0.5	.17	.17			
	46-53	66	20	10-18	1.40-1.60	2.00-6.00	0.12-0.16	0.0-2.9	0.5-1.0	.28	.28			
	53-60	14	73	8-18	1.30-1.40	0.60-2.00	0.19-0.22	0.0-2.9	0.0-0.5	.37	.37			
P:														
Platte-------	0-8	67	23	5-15	1.60-1.80	2.00-6.00	0.16-0.18	0.0-2.9	1.0-3.0	.20	.20	3	3	86
	8-17	63	24	7-18	1.70-1.90	0.60-2.00	0.15-0.19	0.0-2.9	0.0-0.5	.28	.28			
	17-60	97	2	0-3	1.90-2.00	19.98-19.98	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
PL:														
Platte-------	0-8	67	23	5-15	1.60-1.80	2.00-6.00	0.16-0.18	0.0-2.9	1.0-3.0	.20	.20	3	3	86
	8-17	63	24	7-18	1.70-1.90	0.60-2.00	0.15-0.19	0.0-2.9	0.0-0.5	.28	.28			
	17-60	97	2	0-3	1.90-2.00	19.98-19.98	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
Alda---------	0-8	65	27	5-12	1.40-1.60	2.00-6.00	0.16-0.18	0.0-2.9	2.0-4.0	.20	.20	4	3	86
	8-26	66	28	3-10	1.40-1.60	2.00-6.00	0.15-0.17	0.0-2.9	0.5-1.0	.20	.20			
	26-60	98	2	0-2	1.50-1.70	19.98-19.98	0.02-0.04	0.0-2.9	0.0-0.5	.10	.15			
RB:														
Coly---------	0-3	11	68	18-24	1.30-1.50	0.60-2.00	0.20-0.24	0.0-2.9	1.0-2.0	.43	.43	5	4L	86
	3-60	11	68	18-24	1.30-1.50	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
Ru:														
Rusco--------	0-10	11	67	17-27	1.30-1.40	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.32	.32	5	5	56
	10-18	7	62	28-35	1.20-1.30	0.20-0.60	0.18-0.20	3.0-5.9	0.5-1.0	.43	.43			
	18-60	37	43	15-25	1.40-1.50	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
Rw:														
Riverwash----	0-3	94	1	1-8	1.40-1.60	5.95-19.98	0.07-0.09	0.0-2.9	0.0-0.1	.15	.15	5	8	0
	3-60	94	4	0-5	1.65-1.85	5.95-19.98	0.02-0.03	0.0-2.9	0.0-0.5	.10	.15			
Sc:														
Scott--------	0-9	26	53	15-27	1.25-1.40	0.60-2.00	0.21-0.24	0.0-2.9	2.0-4.0	.37	.37	3	6	48
	9-42	6	47	40-55	1.20-1.40	0.00-0.06	0.08-0.16	6.0-8.9	1.0-2.0	.37	.37			
	42-52	19	48	27-40	1.15-1.40	0.20-0.60	0.18-0.20	6.0-8.9	0.5-1.0	.43	.43			
	52-60	24	50	18-35	1.30-1.50	0.60-2.00	0.14-0.22	3.0-5.9	0.5-1.0	.43	.43			
SdA:														
Simeon-------	0-9	68	20	6-18	1.30-1.50	2.00-6.00	0.13-0.15	0.0-2.9	0.5-1.0	.24	.24	5	3	86
	9-60	92	2	2-10	1.50-1.70	5.95-19.98	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15			

PHYSICAL PROPERTIES OF THE SOILS
Buffalo County, Nebraska: Out-of-date

(Single entries under "Sand and Silt" are a representative percentage are calculated using an algorithm. Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer)

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										K	Kf	T		
	In	Pct	Pct	Pct	g/cc	in/hr	In/in	Pct	Pct					
Slc:														
Silver Creek-	0-10	24	52	20-27	1.20-1.45	0.60-2.00	0.20-0.23	0.0-2.9	2.0-4.0	.32	.32	2	6	48
	10-27	8	51	35-48	1.20-1.45	0.06-0.20	0.11-0.18	6.0-8.9	0.5-1.0	.32	.32			
	27-38	26	52	17-27	1.40-1.65	0.60-2.00	0.18-0.20	3.0-5.9	0.5-1.0	.43	.43			
	38-42	64	20	10-24	1.35-1.70	2.00-6.00	0.12-0.17	0.0-2.9	0.0-0.5	.28	.28			
	42-60	85	7	2-15	1.55-1.75	5.95-19.98	0.08-0.10	0.0-2.9	0.0-0.5	.17	.17			
Sx:														
Bolent-------	0-5	96	1	1-5	1.40-1.60	5.95-19.98	0.07-0.09	0.0-2.9	0.5-1.0	.15	.15	5	1	220
	5-60	90	4	1-10	1.50-1.80	5.95-19.98	0.05-0.10	0.0-2.9	0.0-0.5	.15	.17			
TsA:														
Dunday-------	0-25	63	26	7-15	1.35-1.55	2.00-6.00	0.10-0.15	0.0-2.9	1.0-2.0	.20	.20	3	3	86
	25-60	95	1	2-7	1.50-1.70	5.95-19.98	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
TXA:														
Dunday-------	0-25	87	7	3-10	1.40-1.60	5.95-19.98	0.10-0.12	0.0-2.9	1.0-2.0	.17	.17	5	2	134
	25-60	95	1	2-7	1.50-1.70	5.95-19.98	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Valentine----	0-5	87	7	2-10	1.35-1.55	5.95-19.98	0.10-0.12	0.0-2.9	0.5-1.0	.17	.17	5	2	134
	5-60	96	1	0-6	1.60-1.80	5.95-19.98	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
TXB:														
Dunday-------	0-25	87	7	3-10	1.40-1.60	5.95-19.98	0.10-0.12	0.0-2.9	1.0-2.0	.17	.17	5	2	134
	25-60	95	1	2-7	1.50-1.70	5.95-19.98	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Valentine----	0-5	87	7	2-10	1.35-1.55	5.95-19.98	0.10-0.12	0.0-2.9	0.5-1.0	.17	.17	5	2	134
	5-60	96	1	0-6	1.60-1.80	5.95-19.98	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
TYA:														
Dunday-------	0-25	87	7	3-10	1.40-1.60	5.95-19.98	0.10-0.12	0.0-2.9	1.0-2.0	.17	.17	5	2	134
	25-60	95	1	2-7	1.50-1.70	5.95-19.98	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Valentine----	0-5	87	7	2-10	1.35-1.55	5.95-19.98	0.10-0.12	0.0-2.9	0.5-1.0	.17	.17	5	2	134
	5-60	96	1	0-6	1.60-1.80	5.95-19.98	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
UHC:														
Holdrege-----	0-13	9	67	20-27	1.40-1.60	0.60-2.00	0.22-0.24	3.0-5.9	2.0-4.0	.32	.32	5	6	48
	13-22	7	62	28-35	1.20-1.40	0.60-2.00	0.18-0.20	3.0-5.9	0.5-2.0	.43	.43			
	22-28	9	66	20-30	1.30-1.50	0.60-2.00	0.17-0.20	3.0-5.9	0.0-0.5	.43	.43			
	28-60	9	67	20-27	1.40-1.60	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	.43	.43			
Uly----------	0-8	11	67	17-27	1.20-1.45	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.32	.32	5	6	48
	8-14	9	66	20-30	1.25-1.45	0.60-2.00	0.18-0.22	0.0-2.9	0.5-1.0	.43	.43			
	14-60	10	68	18-27	1.25-1.45	0.60-2.00	0.16-0.20	0.0-2.9	0.0-0.5	.43	.43			
UHC2:														
Uly----------	0-8	11	67	17-27	1.20-1.45	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.32	.32	5	6	48
	8-14	9	66	20-30	1.25-1.45	0.60-2.00	0.18-0.22	0.0-2.9	0.5-1.0	.43	.43			
	14-60	10	68	18-27	1.25-1.45	0.60-2.00	0.16-0.20	0.0-2.9	0.0-0.5	.43	.43			
Coly---------	0-8	11	68	18-24	1.30-1.50	0.60-2.00	0.20-0.24	0.0-2.9	1.0-2.0	.43	.43	5	4L	86
	8-60	11	68	18-24	1.30-1.50	0.60-2.00	0.17-0.22	0.0-2.9	0.5-1.0	.43	.43			
Holdrege-----	0-10	9	67	20-27	1.40-1.60	0.60-2.00	0.22-0.24	3.0-5.9	2.0-4.0	.32	.32	5	6	48
	10-22	7	62	28-35	1.20-1.40	0.60-2.00	0.18-0.20	3.0-5.9	0.5-2.0	.43	.43			
	22-28	9	66	20-30	1.30-1.50	0.60-2.00	0.17-0.20	3.0-5.9	0.0-0.5	.43	.43			
	28-60	9	67	20-27	1.40-1.60	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	.43	.43			
UsD:														
Uly----------	0-8	11	67	17-27	1.20-1.45	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.32	.32	5	6	48
	8-14	9	66	20-30	1.25-1.45	0.60-2.00	0.18-0.22	0.0-2.9	0.5-1.0	.43	.43			
	14-60	10	68	18-27	1.25-1.45	0.60-2.00	0.16-0.20	0.0-2.9	0.0-0.5	.43	.43			
VbC:														
Valentine----	0-5	87	7	2-10	1.35-1.55	5.95-19.98	0.10-0.12	0.0-2.9	0.5-1.0	.17	.17	5	2	134
	5-60	96	1	0-6	1.60-1.80	5.95-19.98	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
W:														
Water--------	---			---	---	---	---	---	---	---	---	-	---	0
Wb:														
Wann---------	0-13	64	26	5-15	1.30-1.50	2.00-6.00	0.13-0.18	0.0-2.9	1.0-3.0	.20	.20	5	3	86
	13-60	63	26	3-18	1.50-1.70	2.00-6.00	0.11-0.17	0.0-2.9	0.5-1.0	.28	.28			
Wm:														
Wann---------	0-13	43	38	12-25	1.25-1.45	0.60-2.00	0.20-0.22	0.0-2.9	1.0-3.0	.28	.28	5	5	56
	13-60	63	26	3-18	1.50-1.70	2.00-6.00	0.11-0.17	0.0-2.9	0.5-1.0	.28	.28			
Wr:														
Wood River---	0-11	27	54	14-24	1.10-1.30	0.60-2.00	0.22-0.24	0.0-2.9	2.0-4.0	.37	.37	2	6	48
	11-36	7	53	35-45	1.30-1.40	0.06-0.20	0.11-0.20	6.0-8.9	0.5-1.0	.37	.37			
	36-60	23	50	19-35	1.10-1.30	0.60-2.00	0.18-0.22	3.0-5.9	0.0-0.5	.43	.43			
WrA:														
Wood River---	0-11	27	54	14-24	1.10-1.30	0.60-2.00	0.22-0.24	0.0-2.9	2.0-4.0	.37	.37	2	6	48
	11-36	8	52	35-45	1.30-1.40	0.06-0.20	0.11-0.20	6.0-8.9	0.5-1.0	.37	.37			
	36-60	20	53	19-35	1.10-1.30	0.60-2.00	0.18-0.22	3.0-5.9	0.0-0.5	.43	.43			
WS:														
Wood River---	0-11	27	54	14-24	1.10-1.30	0.60-2.00	0.22-0.24	0.0-2.9	2.0-4.0	.37	.37	2	6	48
	11-36	7	53	35-45	1.30-1.40	0.06-0.20	0.11-0.20	6.0-8.9	0.5-1.0	.37	.37			
	36-60	23	50	19-35	1.10-1.30	0.60-2.00	0.18-0.22	3.0-5.9	0.0-0.5	.43	.43			
Gayville Variant-----	0-16	21	68	7-15	1.20-1.30	0.60-2.00	0.22-0.24	0.0-2.9	2.0-3.0	.32	.32	2	5	56
	16-30	27	42	27-35	1.50-1.60	0.06-0.20	0.15-0.17	3.0-5.9	1.0-2.0	.32	.32			
	30-60	14	73	8-18	1.20-1.40	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	.43	.43			
Wx:														
Barney-------	0-4	23	50	20-35	1.30-1.50	0.20-0.60	0.20-0.23	0.0-2.9	2.0-4.0	.32	.32	5	8	0
	4-60	97	2	0-3	1.65-1.85	19.98-19.98	0.02-0.05	0.0-2.9	0.0-0.5	.05	.10			

CHEMICAL PROPERTIES OF THE SOILS
Buffalo County, Nebraska

The Chemical Properties table shows estimates of some characteristics and features that affect soil behavior. These estimates are given for the major layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils. Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. Soils having a high cation-exchange capacity can retain cations. The ability to retain cations helps to prevent the pollution of ground water.

Soil reaction is a measure of acidity or alkalinity and is expressed as a range in pH values. The range in pH of each major horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil. Incorporating nitrogen fertilizer into calcareous soils helps to prevent nitrite accumulation and ammonium-N volatilization.

Gypsum is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size. Gypsum is partially soluble in water and can be dissolved and removed by water. Soils that have a high content of gypsum may collapse if the gypsum is removed by percolating water.

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

Sodium adsorption ratio (SAR) is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration. Soils that have SAR values of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced permeability and aeration, and a general degradation of soil structure.

CHEMICAL PROPERTIES OF THE SOILS--Continued
Buffalo County, Nebraska

Map symbol and soil name	Depth	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100g	pH	Pct	Pct	mmhos/cm	
2Gg:							
Gibbon----------	0-9	8.0-23	7.4-8.4	0-5	0	4.0-16.0	0-10
	9-40	14-23	7.4-8.4	5-15	0	4.0-8.0	0-10
	40-80	21-30	7.4-8.4	5-15	0	0.0-4.0	0-10
2Hb:							
Hobbs----------	0-28	15-30	6.1-7.8	0	0	0	0
	28-60	10-20	6.1-7.8	0	0	0	0
2Kt:							
Cozad----------	0-12	9.0-15	6.1-7.3	0	0	0	0
	12-58	8.0-13	6.1-7.8	0-5	0	0	0
	58-60	9.0-15	7.0-8.4	2-7	0	0	0
2Or:							
Anselmo---------	0-17	10-20	5.6-7.3	0	0	0	0
	17-46	0.0-10	5.6-7.8	0	0	0	0
	46-53	5.0-15	6.6-7.8	0	0	0	0
	53-60	5.0-13	7.4-8.4	0	0	0	0
2OrB2:							
Anselmo---------	0-17	10-20	5.6-7.3	0	0	0	0
	17-46	0.0-10	5.6-7.8	0	0	0	0
	46-53	5.0-15	6.6-7.8	0	0	0	0
	53-60	5.0-13	7.4-8.4	0	0	0	0
2Sc:							
Scott----------	0-9	20-30	5.1-6.5	0	0	0	0
	9-42	20-35	5.6-7.8	0	0	0	0
	42-52	20-35	6.6-8.4	0-5	0	0	0
	52-60	25-35	6.6-8.4	0-5	0	0	0
2TXA:							
Dunday----------	0-11	5.0-10	6.1-7.3	0	0	0	0
	11-60	1.0-5.0	6.1-7.8	0	0	0	0
Valentine-------	0-5	2.0-8.0	5.6-7.3	0	0	0	0
	5-30	1.0-8.0	5.6-7.3	0	0	0	0
	30-60	0.0-5.0	5.6-7.3	0	0	0	0
AED:							
Arents, Earthen Dam----------	---	---	---	---	---	---	---
Ax:							
Alda----------	0-8	5.0-20	6.6-8.4	0-10	0	0.0-4.0	0-9
	8-26	5.0-10	7.4-8.4	1-5	0	0.0-4.0	0-9
	26-80	0.0-5.0	6.6-8.4	0	0	0.0-4.0	0-9
Ay:							
Alda----------	0-8	10-30	6.6-8.4	0-10	0	0.0-4.0	0-9
	8-26	5.0-10	7.4-8.4	1-5	0	0.0-4.0	0-9
	26-80	0.0-5.0	6.6-8.4	0	0	0.0-4.0	0-9
Bdn:							
Blendon---------	0-26	10-20	5.6-7.3	0	0	0.0-2.0	0
	26-36	5.0-10	6.1-7.8	0	0	0.0-2.0	0
	36-42	5.0-10	7.4-9.0	1-5	0	0.0-2.0	0
	42-80	0.0-5.0	7.8-9.0	1-5	0	0.0-4.0	0-9
BdnA:							
Anselmo---------	0-14	10-20	5.6-7.3	0	0	0	0
	14-26	5.0-15	6.1-7.8	0	0	0	0
	26-36	5.0-15	6.6-7.8	0	0	0	0
	36-80	0.0-10	6.6-8.4	0-3	0	0	0
Bed:							
Blendon---------	0-17	15-25	5.6-7.3	0	0	0.0-2.0	0
	17-26	10-20	6.1-7.3	0	0	0.0-2.0	0
	26-36	5.0-10	6.1-8.4	0-5	0	0.0-2.0	0
	42-80	0.0-5.0	7.8-9.0	1-5	0	0.0-4.0	0-9
BedA:							
Anselmo---------	0-14	10-20	5.6-7.3	0	0	0	0
	14-26	5.0-15	6.1-7.8	0	0	0	0
	26-36	5.0-15	6.6-7.8	0-3	0	0	0
	36-80	0.0-10	6.6-7.8	0-3	0	0	0
Bob:							
Boel----------	0-14	8.0-17	6.6-8.4	0-5	0	0	0
	14-80	0.0-4.0	6.6-8.4	0-5	0	0	0
Boc:							
Boel----------	0-14	13-24	6.6-8.4	0-5	0	0	0
	14-80	0.0-4.0	6.6-8.4	0-5	0	0	0

CHEMICAL PROPERTIES OF THE SOILS--Continued
Buffalo County, Nebraska

Map symbol and soil name	Depth	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100g	pH	Pct	Pct	mmhos/cm	
By:							
Coly----------	0-4	14-19	7.4-8.4	1-5	0	0	0
	4-60	13-18	7.4-8.4	5-10	0	0	0
Hobbs----------	0-28	15-30	6.1-7.8	0	0	0	0
	28-60	20-40	6.6-8.4	0-5	0	0	0
CbC:							
Coly----------	0-8	14-19	7.4-8.4	1-5	0	0	0
	8-80	13-18	7.4-8.4	5-10	0	0	0
CbE:							
Coly----------	0-8	14-19	7.4-8.4	1-5	0	0	0
	8-80	13-18	7.4-8.4	5-10	0	0	0
Cm:							
Cass----------	0-17	8.0-17	5.6-7.3	0	0	0	0
	17-33	4.0-12	6.1-8.4	0	0	0	0
	33-80	1.0-8.0	6.1-8.4	0	0	0	0
Coz:							
Cozad----------	0-18	9.0-20	6.1-7.3	0	0	0	0
	18-48	8.0-13	6.1-7.8	0-5	0	0	0
	48-80	6.0-13	7.4-8.4	1-10	0	0	0
CozA:							
Cozad----------	0-18	9.0-20	6.1-7.3	0	0	0	0
	18-48	8.0-13	6.1-7.8	0-5	0	0	0
	48-80	6.0-13	7.4-8.4	1-10	0	0	0
CozB2:							
Cozad----------	0-7	9.0-20	6.1-7.3	0	0	0	0
	7-38	8.0-13	6.1-7.8	0-5	0	0	0
	38-80	6.0-13	7.4-8.4	1-10	0	0	0
CozC2:							
Cozad----------	0-5	9.0-20	6.1-7.3	0	0	0	0
	5-40	8.0-13	6.1-8.4	0-5	0	0	0
	40-80	6.0-13	6.6-8.4	1-10	0	0	0
Cs:							
Cass----------	0-11	6.0-14	5.6-7.3	0	0	0	0
	11-33	4.0-12	6.1-8.4	0	0	0	0
	33-60	1.0-8.0	6.1-8.4	0	0	0	0
CYE:							
Coly----------	0-5	14-19	7.4-8.4	1-5	0	0	0
	5-60	13-18	7.4-8.4	5-10	0	0	0
Gg:							
Gibbon----------	0-18	16-22	7.4-8.4	0-5	0	0.0-2.0	0
	18-33	14-20	7.4-8.4	5-15	0	0.0-2.0	0-5
	33-80	10-18	7.9-8.4	0	0	0.0-2.0	0-5
Gk:							
Grigston--------	0-12	20-30	6.6-7.8	0	0	0	0
	12-42	5.0-20	6.6-8.4	0-10	0	0.0-2.0	0
	42-80	0.0-5.0	6.6-8.4	0-10	0	0.0-2.0	0
GP:							
Pits----------	0-60	0.0-5.0	6.6-8.4	0	0	0	0
Ha:							
Hall----------	0-17	13-23	6.1-7.3	0	0	0	0
	17-29	15-27	6.1-7.8	0	0	0	0
	29-60	11-22	6.6-7.8	0-5	0	0	0
HaA:							
Hall----------	0-13	13-23	6.1-7.3	0	0	0	0
	13-27	15-27	6.1-7.8	0	0	0	0
	27-60	11-22	6.6-7.8	0-5	0	0	0
Hb:							
Hord----------	0-28	10-20	5.6-7.3	0	0	0	0
	28-38	10-30	6.1-7.8	0	0	0	0
	38-60	10-35	7.4-8.4	0-5	0	0	0
HbA:							
Hord----------	0-28	10-20	5.6-7.3	0	0	0	0
	28-38	10-30	6.1-7.8	0	0	0	0
	38-60	10-35	7.4-8.4	0-5	0	0	0
HbB:							
Hord----------	0-28	10-20	5.6-7.3	0	0	0	0
	28-38	10-30	6.1-7.8	0	0	0	0
	38-60	10-35	7.4-8.4	0-5	0	0	0

CHEMICAL PROPERTIES OF THE SOILS--Continued
Buffalo County, Nebraska

Map symbol and soil name	Depth	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100g	pH	Pct	Pct	mmhos/cm	
Hd:							
Hord----------	0-14	10-20	5.6-7.3	0	0	0	0
	14-48	10-30	6.1-7.8	0	0	0	0
	48-60	10-35	7.4-8.4	0-5	0	0	0
HdA:							
Hord----------	0-14	10-20	5.6-7.3	0	0	0	0
	14-48	10-30	6.1-7.8	0	0	0	0
	48-60	10-35	7.4-8.4	0-5	0	0	0
HoA:							
Holdrege--------	0-13	16-24	5.6-7.3	0	0	0	0
	13-22	19-26	6.6-7.8	0	0	0	0
	22-28	14-21	6.6-7.8	0	0	0	0
	28-60	14-19	7.4-8.4	0-5	0	0	0
HoB:							
Holdrege--------	0-13	16-24	5.6-7.3	0	0	0	0
	13-22	19-26	6.6-7.8	0	0	0	0
	22-28	14-21	6.6-7.8	0	0	0	0
	28-60	14-19	7.4-8.4	0-5	0	0	0
HoB2:							
Holdrege--------	0-10	16-24	5.6-7.3	0	0	0	0
	10-22	19-26	6.6-7.8	0	0	0	0
	22-60	14-21	6.6-7.8	0	0	0	0
HQ:							
Holdrege--------	0-13	16-24	5.6-7.3	0	0	0	0
	13-22	19-26	6.6-7.8	0	0	0	0
	22-28	14-21	6.6-7.8	0	0	0	0
	28-60	14-19	7.4-8.4	0-5	0	0	0
Hall----------	0-17	13-23	6.1-7.3	0	0	0	0
	17-29	15-27	6.1-7.8	0	0	0	0
	29-60	11-22	6.6-7.8	0-5	0	0	0
In:							
Inavale---------	0-10	5.0-15	5.6-7.8	0	0	0	0
	10-60	0.0-10	5.6-7.8	0	0	0	0
KCB:							
Kenesaw---------	0-8	9.0-17	6.1-7.3	0	0	0	0
	8-22	7.0-13	6.6-8.4	0-5	0	0	0
	22-60	5.0-13	7.4-8.4	1-5	0	0	0
Coly----------	0-8	14-19	7.4-8.4	1-5	0	0	0
	8-60	13-18	7.4-8.4	5-10	0	0	0
Ks:							
Kenesaw---------	0-8	9.0-17	6.1-7.3	0	0	0	0
	8-22	7.0-13	6.6-8.4	0-5	0	0	0
	22-60	5.0-13	7.4-8.4	1-5	0	0	0
KsA:							
Kenesaw---------	0-8	9.0-17	6.1-7.3	0	0	0	0
	8-22	7.0-13	6.6-8.4	0-5	0	0	0
	22-60	5.0-13	7.4-8.4	1-5	0	0	0
KsB:							
Kenesaw---------	0-8	9.0-17	6.1-7.3	0	0	0	0
	8-22	7.0-13	6.6-8.4	0-5	0	0	0
	22-60	5.0-13	7.4-8.4	1-5	0	0	0
Lex:							
Lex----------	0-9	11-22	7.4-8.4	1-10	0	0.0-4.0	0-6
	9-18	12-23	6.1-8.4	0-5	0	0.0-4.0	0-6
	18-24	5.0-20	6.6-8.4	0-10	0	0.0-2.0	0
	24-60	2.0-5.0	6.1-7.8	0-2	0	0.0-4.0	0-6
Lf:							
Leshara---------	0-9	5.0-15	6.1-8.4	0	0	0.0-2.0	0
	9-51	5.0-20	6.6-8.4	0-10	0	0.0-2.0	0
	51-60	0.0-5.0	6.6-8.4	0-10	0	0.0-2.0	0
LG:							
Leshara---------	0-9	10-22	6.1-8.4	0	0	0.0-2.0	0
	9-51	5.0-20	6.6-8.4	0-10	0	0.0-2.0	0
	51-60	0.0-5.0	6.6-8.4	0-10	0	0.0-2.0	0
Gibbon----------	0-21	16-22	7.4-8.4	0-5	0	0.0-2.0	0
	21-33	14-20	7.4-8.4	2-10	0	0.0-2.0	0-5
	33-60	10-18	7.9-8.4	2-10	0	0.0-2.0	0-5
Lm:							
Loup----------	0-10	10-20	5.6-7.8	3-7	0	0	0
	10-24	0.0-5.0	5.6-7.3	0	0	0	0
	24-60	0.0-15	5.6-7.3	0	0	0	0

CHEMICAL PROPERTIES OF THE SOILS--Continued
Buffalo County, Nebraska

Map symbol and soil name	Depth	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100g	pH	Pct	Pct	mmhos/cm	
Lx:							
Gothenburg------	0-11	5.0-10	6.6-8.4	0-5	0	0	0
	11-80	0.0-5.0	6.6-7.8	0	0	0	0
M:							
Fluvaquents-----	0-60	0.0-5.0	5.6-7.3	0	0	0	0
M-W:							
Miscellaneous Water----------	---	---	---	---	---	---	---
OrC:							
Anselmo---------	0-14	10-20	5.6-7.3	0	0	0	0
	14-46	0.0-10	5.6-7.8	0	0	0	0
	46-53	5.0-15	6.6-7.8	0	0	0	0
	53-60	5.0-13	7.4-8.4	0	0	0	0
P:							
Platte----------	0-8	3.0-15	6.6-8.4	0-10	0	0.0-2.0	0
	8-17	4.0-20	6.6-8.4	0-5	0	0.0-2.0	0
	17-60	0.0-3.0	6.6-8.4	0-5	0	0.0-2.0	0
PL:							
Platte----------	0-8	3.0-15	6.6-8.4	0-10	0	0.0-2.0	0
	8-17	4.0-20	6.6-8.4	0-5	0	0.0-2.0	0
	17-60	0.0-3.0	6.6-8.4	0-5	0	0.0-2.0	0
Alda----------	0-8	5.0-20	6.6-8.4	0-10	0	0.0-4.0	0-9
	8-26	5.0-10	7.4-8.4	1-15	0	0.0-4.0	0-9
	26-60	0.0-5.0	6.6-8.4	0-5	0	0.0-4.0	0-9
RB:							
Coly----------	0-3	14-19	7.4-8.4	1-5	0	0	0
	3-60	13-18	7.4-8.4	5-10	0	0	0
Ru:							
Rusco----------	0-10	10-30	6.1-7.8	0	0	0	0
	10-18	20-30	6.6-8.4	0-5	0	0	0
	18-60	10-20	6.6-8.4	1-10	0	0	0
Rw:							
Riverwash-------	0-3	1.0-10	7.4-8.4	0-5	0	0	0
	3-60	0.0-5.0	7.4-8.4	0-5	0	0	0
Sc:							
Scott----------	0-9	20-30	5.1-6.5	0	0	0	0
	9-42	20-35	5.6-7.8	0	0	0	0
	42-52	20-35	6.6-8.4	0-5	0	0	0
	52-60	25-35	6.6-8.4	0-5	0	0	0
SdA:							
Simeon----------	0-9	0.0-10	6.1-7.8	0	0	0	0
	9-60	0.0-5.0	6.1-7.8	0	0	0	0
Slc:							
Silver Creek----	0-10	15-25	6.6-7.8	0-5	0	2.0-4.0	0-5
	10-27	25-40	7.4-8.4	1-15	0	2.0-8.0	0-5
	27-38	10-20	7.9-9.0	1-15	0	2.0-8.0	5-10
	38-42	5.0-20	7.9-8.4	1-15	0	2.0-4.0	0-5
	42-60	2.0-10	7.9-8.4	1-15	0	2.0-4.0	0-5
Sx:							
Bolent----------	0-5	1.0-5.0	7.4-8.4	1-10	0	0	0
	5-60	1.0-10	6.6-7.8	0	0	0	0
TsA:							
Dunday----------	0-25	5.0-15	6.1-7.3	0	0	0	0
	25-60	1.0-5.0	6.1-7.8	0	0	0	0
TXA:							
Dunday----------	0-25	5.0-10	6.1-7.3	0	0	0	0
	25-60	1.0-5.0	6.1-7.8	0	0	0	0
Valentine-------	0-5	2.0-8.0	5.6-7.3	0	0	0	0
	5-60	0.0-5.0	5.6-7.3	0	0	0	0
TXB:							
Dunday----------	0-25	5.0-10	6.1-7.3	0	0	0	0
	25-60	1.0-5.0	6.1-7.8	0	0	0	0
Valentine-------	0-5	2.0-8.0	5.6-7.3	0	0	0	0
	5-60	0.0-5.0	5.6-7.3	0	0	0	0
TYA:							
Dunday----------	0-25	5.0-10	6.1-7.3	0	0	0	0
	25-60	1.0-5.0	6.1-7.8	0	0	0	0
Valentine-------	0-5	2.0-8.0	5.6-7.3	0	0	0	0
	5-60	0.0-5.0	5.6-7.3	0	0	0	0

CHEMICAL PROPERTIES OF THE SOILS--Continued
Buffalo County, Nebraska

Map symbol and soil name	Depth	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100g	pH	Pct	Pct	mmhos/cm	
UHC:							
Uly----------	0-8	10-20	6.1-7.8	0	0	0	0
	8-14	14-25	6.1-7.8	0	0	0	0
	14-60	12-20	7.4-8.4	1-15	0	0	0
Holdrege--------	0-13	16-24	5.6-7.3	0	0	0	0
	13-22	19-26	6.6-7.8	0	0	0	0
	22-28	14-21	6.6-7.8	0	0	0	0
	28-60	14-19	7.4-8.4	0-5	0	0	0
UHC2:							
Uly----------	0-8	10-20	6.1-7.8	0	0	0	0
	8-14	14-25	6.1-7.8	0	0	0	0
	14-60	12-20	7.4-8.4	1-15	0	0	0
Holdrege--------	0-10	16-24	5.6-7.3	0	0	0	0
	10-22	19-26	6.6-7.8	0	0	0	0
	22-28	14-21	6.6-7.8	0	0	0	0
	28-60	14-19	7.4-8.4	0-5	0	0	0
Coly----------	0-8	14-19	7.4-8.4	1-5	0	0	0
	8-60	13-18	7.4-8.4	5-10	0	0	0
UsD:							
Uly----------	0-8	10-20	6.1-7.8	0	0	0	0
	8-14	14-25	6.1-7.8	0	0	0	0
	14-60	12-20	7.4-8.4	1-15	0	0	0
VbC:							
Valentine-------	0-5	2.0-8.0	5.6-7.3	0	0	0	0
	5-60	0.0-5.0	5.6-7.3	0	0	0	0
W:							
Water----------	---	---	---	---	---	---	---
Wb:							
Wann----------	0-13	4.0-14	6.6-8.4	0-5	0	0.0-2.0	0-5
	13-60	2.0-14	7.4-9.0	0-5	0	0.0-2.0	0-10
Wm:							
Wann----------	0-13	9.0-21	6.6-8.4	0-5	0	0.0-2.0	0-5
	13-60	2.0-14	7.4-9.0	0-5	0	0.0-2.0	0-10
Wr:							
Wood River------	0-11	10-25	5.6-7.3	0	0	0.0-4.0	0-13
	11-36	25-35	7.4-9.0	0	0	2.0-4.0	9-20
	36-60	10-25	7.4-9.6	1-15	0	4.0-8.0	6-15
WrA:							
Wood River------	0-11	10-25	5.6-7.3	0	0	0.0-4.0	0-13
	11-36	25-35	7.4-9.0	0	0	2.0-4.0	9-20
	36-60	10-25	7.4-9.6	1-15	0	4.0-8.0	6-15
WS:							
Wood River------	0-11	10-25	6.6-7.8	0-5	0	0.0-4.0	0-13
	11-36	25-35	7.4-9.6	1-15	0	4.0-8.0	13-99
	36-60	10-25	7.4-9.6	1-15	0	4.0-8.0	13-99
Gayville Variant	0-16	4.0-13	6.1-7.3	0	0	0.0-4.0	0-9
	16-30	18-28	8.5-9.6	1-10	0	4.0-8.0	9-15
	30-60	5.0-13	8.5-9.6	1-10	0	0.0-8.0	9-15
Wx:							
Barney----------	0-4	15-28	6.6-8.4	0-5	0	0	0
	4-60	0.0-2.0	6.6-7.8	0	0	0	0

WATER FEATURES
Buffalo County, Nebraska

The Water Features table gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations. Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

The months in the table indicate the portion of the year in which the feature is most likely to be a concern.

Water table refers to a saturated zone in the soil. The Water Features table indicates, by month, depth to the top (upper limit) and base (lower limit) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table. Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. The Water Features table indicates surface water depth and the duration and frequency of ponding. Duration is expressed as very brief if less than 2 days, brief if 2 to 7 days, long if 7 to 30 days, and very long if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. None means that ponding is not probable; rare that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); occasional that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and frequent that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding, the temporary inundation of an area, is caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and frequency are estimated. Duration is expressed as extremely brief if 0.1 hour to 4 hours, very brief if 4 hours to 2 days, brief if 2 to 7 days, long if 7 to 30 days, and very long if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. None means that flooding is not probable; very rare that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); rare that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); occasional that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); frequent that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and very frequent that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

WATER FEATURES--Continued
Buffalo County, Nebraska

(Depths of layers are in feet. See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Hydrologic group	Month	Soil Saturation		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
2Gg:									
Gibbon	B								
		January	2.0-5.0	>6.0	---	---	---	---	None
		February	2.0-5.0	>6.0	---	---	---	---	None
		March	2.0-5.0	>6.0	---	---	---	---	None
		April	2.0-5.0	>6.0	---	---	---	---	None
		May	2.0-5.0	>6.0	---	---	---	---	None
		June	2.0-5.0	>6.0	---	---	---	---	None
		November	2.0-5.0	>6.0	---	---	---	---	None
		December	2.0-5.0	>6.0	---	---	---	---	None
2Hb:									
Hobbs	B								
		April	---	---	---	---	---	Brief	Occasional
		May	---	---	---	---	---	Brief	Occasional
		June	---	---	---	---	---	Brief	Occasional
		July	---	---	---	---	---	Brief	Occasional
		August	---	---	---	---	---	Brief	Occasional
		September	---	---	---	---	---	Brief	Occasional
2Kt:									
Cozad	B								
			---	---	---	---	---	---	---
2Or:									
Anselmo	B								
			---	---	---	---	---	---	---
2OrB2:									
Anselmo	B								
			---	---	---	---	---	---	---
2Sc:									
Scott	D								
		March	0.0-1.0	1.0-3.0	0.0-1.0	Brief	Occasional	---	None
		April	0.0-1.0	1.0-3.0	0.0-1.0	Brief	Occasional	---	None
		May	0.0-1.0	1.0-3.0	0.0-1.0	Brief	Occasional	---	None
		June	0.0-1.0	1.0-3.0	0.0-1.0	Brief	Occasional	---	None
		July	0.0-1.0	1.0-3.0	0.0-1.0	Brief	Occasional	---	None
		August	0.0-1.0	1.0-3.0	0.0-1.0	Brief	Occasional	---	None
2TXA:									
Dunday	A								
			---	---	---	---	---	---	---
Valentine	A								
			---	---	---	---	---	---	---
Ax:									
Alda	C								
		January	2.5-6.0	>6.0	---	---	---	---	None
		February	2.5-6.0	>6.0	---	---	---	---	None
		March	2.5-6.0	>6.0	---	---	---	---	None
		April	2.5-6.0	>6.0	---	---	---	---	None
		May	2.5-6.0	>6.0	---	---	---	---	None
		November	2.5-6.0	>6.0	---	---	---	---	None
		December	2.5-6.0	>6.0	---	---	---	---	None
Ay:									
Alda	C								
		January	2.0-6.0	>6.0	---	---	---	---	None
		February	2.0-6.0	>6.0	---	---	---	---	None
		March	2.0-6.0	>6.0	---	---	---	---	None
		April	2.0-6.0	>6.0	---	---	---	---	None
		May	2.0-6.0	>6.0	---	---	---	---	None
		November	2.0-6.0	>6.0	---	---	---	---	None
		December	2.0-6.0	>6.0	---	---	---	---	None
Bdn:									
Blendon	B								
			---	---	---	---	---	---	---
BdnA:									
Anselmo	B								
			---	---	---	---	---	---	---
Bed:									
Blendon	B								
			---	---	---	---	---	---	---
BedA:									
Anselmo	B								
			---	---	---	---	---	---	---
Bob:									
Boel	A								
		January	2.0-5.0	>6.0	---	---	---	---	None
		February	2.0-5.0	>6.0	---	---	---	---	None
		March	2.0-5.0	>6.0	---	---	---	Brief	Occasional
		April	2.0-5.0	>6.0	---	---	---	Brief	Occasional
		May	2.0-5.0	>6.0	---	---	---	Brief	Occasional
		June	---	---	---	---	---	Brief	Occasional
		November	2.0-5.0	>6.0	---	---	---	---	None
		December	2.0-5.0	>6.0	---	---	---	---	None
Boc:									

WATER FEATURES--Continued
Buffalo County, Nebraska

(Depths of layers are in feet. See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Hydrologic group	Month	Soil Saturation		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
Boel	A								
		January	2.0-5.0	>6.0	---	---	---	---	None
		February	2.0-5.0	>6.0	---	---	---	---	None
		March	2.0-5.0	>6.0	---	---	---	Brief	Occasional
		April	2.0-5.0	>6.0	---	---	---	Brief	Occasional
		May	2.0-5.0	>6.0	---	---	---	Brief	Occasional
		June	---	---	---	---	---	Brief	Occasional
		November	2.0-5.0	>6.0	---	---	---	---	None
		December	2.0-5.0	>6.0	---	---	---	---	None
By:									
Coly	B								
			---	---	---	---	---	---	---
Hobbs	B								
		April	---	---	---	---	---	Brief	Frequent
		May	---	---	---	---	---	Brief	Frequent
		June	---	---	---	---	---	Brief	Frequent
		July	---	---	---	---	---	Brief	Frequent
		August	---	---	---	---	---	Brief	Frequent
		September	---	---	---	---	---	Brief	Frequent
CbC:									
Coly	B								
			---	---	---	---	---	---	---
CbE:									
Coly	B								
			---	---	---	---	---	---	---
Cm:									
Cass	B								
			---	---	---	---	---	---	---
Coz:									
Cozad	B								
			---	---	---	---	---	---	---
CozA:									
Cozad	B								
			---	---	---	---	---	---	---
CozB2:									
Cozad	B								
			---	---	---	---	---	---	---
CozC2:									
Cozad	B								
			---	---	---	---	---	---	---
Cs:									
Cass	B								
			---	---	---	---	---	---	---
CYE:									
Coly	B								
			---	---	---	---	---	---	---
Gg:									
Gibbon	B								
		January	2.0-5.0	>6.0	---	---	---	---	None
		February	2.0-5.0	>6.0	---	---	---	---	None
		March	2.0-5.0	>6.0	---	---	---	---	None
		April	2.0-5.0	>6.0	---	---	---	---	None
		May	2.0-5.0	>6.0	---	---	---	---	None
		June	2.0-5.0	>6.0	---	---	---	---	None
		November	2.0-5.0	>6.0	---	---	---	---	None
		December	2.0-5.0	>6.0	---	---	---	---	None
Gk:									
Grigston	B								
			---	---	---	---	---	---	---
GP:									
Pits	A								
			---	---	---	---	---	---	---
Ha:									
Hall	B								
			---	---	---	---	---	---	---
HaA:									
Hall	B								
			---	---	---	---	---	---	---
Hb:									
Hord	B								
			---	---	---	---	---	---	---
HbA:									
Hord	B								
			---	---	---	---	---	---	---
HbB:									
Hord	B								
			---	---	---	---	---	---	---
Hd:									
Hord	B								
			---	---	---	---	---	---	---
HdA:									
Hord	B								
			---	---	---	---	---	---	---
HoA:									

WATER FEATURES--Continued
Buffalo County, Nebraska

(Depths of layers are in feet. See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Hydrologic group	Month	Soil Saturation		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
Holdrege	B		---	---	---	---	---	---	---
HoB:									
Holdrege	B		---	---	---	---	---	---	---
HoB2:									
Holdrege	B		---	---	---	---	---	---	---
HQ:									
Holdrege	B		---	---	---	---	---	---	---
Hall	B		---	---	---	---	---	---	---
In:									
Inavale	A								
		January	5.0-6.0	>6.0	---	---	---	---	None
		February	5.0-6.0	>6.0	---	---	---	---	None
		March	5.0-6.0	>6.0	---	---	---	---	None
		April	5.0-6.0	>6.0	---	---	---	---	None
		May	5.0-6.0	>6.0	---	---	---	---	None
		June	5.0-6.0	>6.0	---	---	---	---	None
KCB:									
Kenesaw	B		---	---	---	---	---	---	---
Coly	B		---	---	---	---	---	---	---
Ks:									
Kenesaw	B		---	---	---	---	---	---	---
KsA:									
Kenesaw	B		---	---	---	---	---	---	---
KsB:									
Kenesaw	B		---	---	---	---	---	---	---
Lex:									
Lex	B								
		January	2.0-5.0	>6.0	---	---	---	---	None
		February	2.0-5.0	>6.0	---	---	---	---	None
		March	2.0-5.0	>6.0	---	---	---	---	None
		April	2.0-5.0	>6.0	---	---	---	---	None
		May	2.0-5.0	>6.0	---	---	---	---	None
		June	2.0-5.0	>6.0	---	---	---	---	None
		November	2.0-5.0	>6.0	---	---	---	---	None
		December	2.0-5.0	>6.0	---	---	---	---	None
Lf:									
Leshara	B								
		January	2.0-5.0	>6.0	---	---	---	---	None
		February	2.0-5.0	>6.0	---	---	---	---	None
		March	2.0-5.0	>6.0	---	---	---	---	None
		April	2.0-5.0	>6.0	---	---	---	---	None
		May	2.0-5.0	>6.0	---	---	---	---	None
		June	2.0-5.0	>6.0	---	---	---	---	None
		November	2.0-5.0	>6.0	---	---	---	---	None
		December	2.0-5.0	>6.0	---	---	---	---	None
LG:									
Gibbon	B								
		January	2.0-5.0	>6.0	---	---	---	---	None
		February	2.0-5.0	>6.0	---	---	---	---	None
		March	2.0-5.0	>6.0	---	---	---	---	None
		April	2.0-5.0	>6.0	---	---	---	---	None
		May	2.0-5.0	>6.0	---	---	---	---	None
		June	2.0-5.0	>6.0	---	---	---	---	None
		November	2.0-5.0	>6.0	---	---	---	---	None
		December	2.0-5.0	>6.0	---	---	---	---	None
Leshara	B								
		January	2.0-5.0	>6.0	---	---	---	---	None
		February	2.0-5.0	>6.0	---	---	---	---	None
		March	2.0-5.0	>6.0	---	---	---	---	None
		April	2.0-5.0	>6.0	---	---	---	---	None
		May	2.0-5.0	>6.0	---	---	---	---	None
		June	2.0-5.0	>6.0	---	---	---	---	None
		November	2.0-5.0	>6.0	---	---	---	---	None
		December	2.0-5.0	>6.0	---	---	---	---	None
Lm:									
Loup	D								
		January	0.0-3.0	>6.0	---	---	---	---	None
		February	0.0-3.0	>6.0	---	---	---	---	None
		March	0.0-3.0	>6.0	---	---	---	---	None
		April	0.0-3.0	>6.0	---	---	---	---	None
		May	0.0-3.0	>6.0	---	---	---	---	None
		June	0.0-3.0	>6.0	---	---	---	---	None
		November	0.0-3.0	>6.0	---	---	---	---	None
		December	0.0-3.0	>6.0	---	---	---	---	None

WATER FEATURES--Continued
Buffalo County, Nebraska

(Depths of layers are in feet. See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Hydrologic group	Month	Soil Saturation		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
Lx:									
Gothenburg	D								
		January	0.0-3.0	>6.0	---	---	---	---	None
		February	0.0-3.0	>6.0	---	---	---	---	None
		March	0.0-3.0	>6.0	---	---	---	Brief	Frequent
		April	0.0-3.0	>6.0	---	---	---	Brief	Frequent
		May	0.0-3.0	>6.0	---	---	---	Brief	Frequent
		June	0.0-3.0	>6.0	---	---	---	Brief	Frequent
		November	0.0-3.0	>6.0	---	---	---	---	None
		December	0.0-3.0	>6.0	---	---	---	---	None
M:									
Fluvaquents	D								
		January	0.0	>6.0	0.0-2.0	Very long	---	---	None
		February	0.0	>6.0	0.0-2.0	Very long	---	Brief	Occasional
		March	0.0	>6.0	0.0-2.0	Very long	---	Brief	Occasional
		April	0.0	>6.0	0.0-2.0	Very long	---	Brief	Occasional
		May	0.0	>6.0	0.0-2.0	Very long	---	---	None
		June	0.0	>6.0	0.0-2.0	Very long	---	---	None
		July	0.0	>6.0	0.0-2.0	Very long	---	---	None
		August	0.0	>6.0	0.0-2.0	Very long	---	---	None
		September	0.0	>6.0	0.0-2.0	Very long	---	---	None
		October	0.0	>6.0	0.0-2.0	Very long	---	---	None
		November	0.0	>6.0	0.0-2.0	Very long	---	---	None
		December	0.0	>6.0	0.0-2.0	Very long	---	---	None
OrC:									
Anselmo	B								
			---	---	---	---	---	---	---
P:									
Platte	B								
		January	2.0-5.0	>6.0	---	---	---	---	None
		February	2.0-5.0	>6.0	---	---	---	Brief	Occasional
		March	2.0-5.0	>6.0	---	---	---	Brief	Occasional
		April	2.0-5.0	>6.0	---	---	---	Brief	Occasional
		May	2.0-5.0	>6.0	---	---	---	---	None
		June	2.0-5.0	>6.0	---	---	---	---	None
		November	2.0-5.0	>6.0	---	---	---	---	None
		December	2.0-5.0	>6.0	---	---	---	---	None
PL:									
Platte	B								
		January	2.0-5.0	>6.0	---	---	---	---	None
		February	2.0-5.0	>6.0	---	---	---	Brief	Occasional
		March	2.0-5.0	>6.0	---	---	---	Brief	Occasional
		April	2.0-5.0	>6.0	---	---	---	Brief	Occasional
		May	2.0-5.0	>6.0	---	---	---	---	None
		June	2.0-5.0	>6.0	---	---	---	---	None
Alda	C								
		January	2.5-6.0	>6.0	---	---	---	---	None
		February	2.5-6.0	>6.0	---	---	---	---	None
		March	2.5-6.0	>6.0	---	---	---	---	None
		April	2.5-6.0	>6.0	---	---	---	---	None
		May	2.5-6.0	>6.0	---	---	---	---	None
		November	2.5-6.0	>6.0	---	---	---	---	None
		December	2.5-6.0	>6.0	---	---	---	---	None
RB:									
Coly	B								
			---	---	---	---	---	---	---
Ru:									
Rusco	C								
		January	0.5-1.0	2.0	---	---	---	---	None
		February	0.5-1.0	2.0	0.0-0.3	Very brief	Rare	---	None
		March	0.5-1.0	2.0	0.0-0.3	Very brief	Rare	---	None
		April	0.5-1.0	2.0	0.0-0.3	Very brief	Rare	---	None
		May	0.5-1.0	2.0	0.0-0.3	Very brief	Rare	---	None
		June	0.5-1.0	2.0	0.0-0.3	Very brief	Rare	---	None
		November	0.5-1.0	2.0	---	---	---	---	None
		December	0.5-1.0	2.0	---	---	---	---	None
Rw:									
Riverwash	D								
		January	0.0-3.0	>6.0	---	---	---	---	None
		February	0.0-3.0	>6.0	---	---	---	---	None
		March	0.0-3.0	>6.0	---	---	---	Brief	Frequent
		April	0.0-3.0	>6.0	---	---	---	Brief	Frequent
		May	0.0-3.0	>6.0	---	---	---	Brief	Frequent
		June	0.0-3.0	>6.0	---	---	---	Brief	Frequent
		July	0.0-3.0	>6.0	---	---	---	---	None
		August	0.0-3.0	>6.0	---	---	---	---	None
		September	0.0-3.0	>6.0	---	---	---	---	None
		October	0.0-3.0	>6.0	---	---	---	---	None
		November	0.0-3.0	>6.0	---	---	---	---	None
		December	0.0-3.0	>6.0	---	---	---	---	None
Sc:									

WATER FEATURES--Continued
Buffalo County, Nebraska

(Depths of layers are in feet. See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Hydrologic group	Month	Soil Saturation		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
Scott	D								
		March	0.0-1.0	1.0-3.0	0.0-1.0	Long	Frequent	---	None
		April	0.0-1.0	1.0-3.0	0.0-1.0	Long	Frequent	---	None
		May	0.0-1.0	1.0-3.0	0.0-1.0	Long	Frequent	---	None
		June	0.0-1.0	1.0-3.0	0.0-1.0	Long	Frequent	---	None
		July	0.0-1.0	1.0-3.0	0.0-1.0	Long	Frequent	---	None
		August	0.0-1.0	1.0-3.0	0.0-1.0	Long	Frequent	---	None
SdA:									
Simeon	A		---	---	---	---	---	---	---
Slc:									
Silver Creek	D								
		March	3.0-6.0	>6.0	---	---	---	---	None
		April	3.0-6.0	>6.0	---	---	---	---	None
		May	3.0-6.0	>6.0	---	---	---	---	None
		June	3.0-6.0	>6.0	---	---	---	---	None
Sx:									
Bolent	A								
		January	3.0-6.0	>6.0	---	---	---	---	None
		February	3.0-6.0	>6.0	---	---	---	---	None
		March	3.0-6.0	>6.0	---	---	---	Brief	Occasional
		April	3.0-6.0	>6.0	---	---	---	Brief	Occasional
		May	3.0-6.0	>6.0	---	---	---	Brief	Occasional
		June	---	---	---	---	---	Brief	Occasional
		November	3.0-6.0	>6.0	---	---	---	---	None
		December	3.0-6.0	>6.0	---	---	---	---	None
TsA:									
Dunday	A		---	---	---	---	---	---	---
TXA:									
Dunday	A		---	---	---	---	---	---	---
Valentine	A		---	---	---	---	---	---	---
TXB:									
Dunday	A		---	---	---	---	---	---	---
Valentine	A		---	---	---	---	---	---	---
TYA:									
Dunday	A		---	---	---	---	---	---	---
Valentine	A		---	---	---	---	---	---	---
UHC:									
Holdrege	B		---	---	---	---	---	---	---
Uly	B		---	---	---	---	---	---	---
UHC2:									
Uly	B		---	---	---	---	---	---	---
Coly	B		---	---	---	---	---	---	---
Holdrege	B		---	---	---	---	---	---	---
UsD:									
Uly	B		---	---	---	---	---	---	---
VbC:									
Valentine	A		---	---	---	---	---	---	---
W:									
Water	---		---	---	---	---	---	---	---
Wb:									
Wann	B								
		January	3.0-5.0	>6.0	---	---	---	---	None
		February	3.0-5.0	>6.0	---	---	---	---	None
		March	3.0-5.0	>6.0	---	---	---	---	None
		April	3.0-5.0	>6.0	---	---	---	---	None
		May	3.0-5.0	>6.0	---	---	---	---	None
		June	3.0-5.0	>6.0	---	---	---	---	None
		November	3.0-5.0	>6.0	---	---	---	---	None
		December	3.0-5.0	>6.0	---	---	---	---	None
Wm:									

WATER FEATURES--Continued
Buffalo County, Nebraska

(Depths of layers are in feet. See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Hydrologic group	Month	Soil Saturation		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
Wann----------	B								
		January	3.0-5.0	>6.0	---	---	---	---	None
		February	3.0-5.0	>6.0	---	---	---	---	None
		March	3.0-5.0	>6.0	---	---	---	---	None
		April	3.0-5.0	>6.0	---	---	---	---	None
		May	3.0-5.0	>6.0	---	---	---	---	None
		June	3.0-5.0	>6.0	---	---	---	---	None
		November	3.0-5.0	>6.0	---	---	---	---	None
		December	3.0-5.0	>6.0	---	---	---	---	None
Wr:									
Wood River----------	D		---	---	---	---	---	---	---
WrA:									
Wood River----------	D		---	---	---	---	---	---	---
WS:									
Wood River----------	D		---	---	---	---	---	---	---
Gayville Variant----------	C								
		January	3.0-6.0	>6.0	---	---	---	Brief	Rare
		February	3.0-6.0	>6.0	---	---	---	Brief	Rare
		March	3.0-6.0	>6.0	---	---	---	Brief	Rare
		April	3.0-6.0	>6.0	---	---	---	Brief	Rare
		May	3.0-6.0	>6.0	---	---	---	Brief	Rare
		June	3.0-6.0	>6.0	---	---	---	Brief	Rare
		December	3.0-6.0	>6.0	---	---	---	Brief	Rare
Wx:									
Barney----------	D								
		January	0.0-3.0	>6.0	---	---	---	---	None
		February	0.0-3.0	>6.0	---	---	---	---	None
		March	0.0-3.0	>6.0	---	---	---	Brief	Frequent
		April	0.0-3.0	>6.0	---	---	---	Brief	Frequent
		May	0.0-3.0	>6.0	---	---	---	Brief	Frequent
		June	0.0-3.0	>6.0	---	---	---	Brief	Frequent
		November	0.0-3.0	>6.0	---	---	---	---	None
		December	0.0-3.0	>6.0	---	---	---	---	---

SOIL FEATURES
Buffalo County, Nebraska

The following table gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A restrictive layer is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. Depth to top is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as low, moderate, or high, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as low, moderate, or high. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

SOIL FEATURES--Continued
Buffalo County, Nebraska

Map symbol and soil name	Restrictive layer				Potential for Frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated Steel	Concrete
		In	In				
2Gg:							
Gibbon----------	---	---	---	---	High	High	High
2Hb:							
Hobbs-----------	---	---	---	---	Moderate	Low	Low
2Kt:							
Cozad-----------	---	---	---	---	Moderate	Low	Low
2Or:							
Anselmo---------	---	---	---	---	Moderate	Moderate	Low
2OrB2:							
Anselmo---------	---	---	---	---	Moderate	Moderate	Low
2Sc:							
Scott-----------	---	---	---	---	High	High	Low
2TXA:							
Dunday----------	---	---	---	---	Low	Low	Low
Valentine-------	---	---	---	---	Low	Low	Low
AED:							
Arents, Earthen Dam----------	---	---	---	---	---	---	---
Ax:							
Alda------------	---	---	---	---	High	Moderate	Low
Ay:							
Alda------------	---	---	---	---	High	Moderate	Low
Bdn:							
Blendon---------	---	---	---	---	Moderate	Moderate	Low
BdnA:							
Anselmo---------	---	---	---	---	Moderate	Moderate	Low
Bed:							
Blendon---------	---	---	---	---	Moderate	Moderate	Low
BedA:							
Anselmo---------	---	---	---	---	Moderate	Moderate	Low
Bob:							
Boel------------	---	---	---	---	Moderate	High	Low
Boc:							
Boel------------	---	---	---	---	Moderate	High	Low
By:							
Coly------------	---	---	---	---	Moderate	High	Low
Hobbs-----------	---	---	---	---	Moderate	Low	Low
CbC:							
Coly------------	---	---	---	---	Moderate	High	Low
CbE:							
Coly------------	---	---	---	---	Moderate	High	Low
Cm:							
Cass------------	---	---	---	---	Moderate	Moderate	Low
Coz:							
Cozad-----------	---	---	---	---	Moderate	Low	Low
CozA:							
Cozad-----------	---	---	---	---	Moderate	Low	Low
CozB2:							
Cozad-----------	---	---	---	---	Moderate	Low	Low
CozC2:							
Cozad-----------	---	---	---	---	Moderate	Low	Low
Cs:							
Cass------------	---	---	---	---	Moderate	Moderate	Low
CYE:							
Coly------------	---	---	---	---	Moderate	High	Low
Gg:							
Gibbon----------	---	---	---	---	High	High	Low
Gk:							
Grigston--------	---	---	---	---	Moderate	Low	Low
GP:							
Pits------------	---	---	---	---	Low	Low	Low
Ha:							
Hall------------	---	---	---	---	Moderate	Moderate	Low
HaA:							
Hall------------	---	---	---	---	Moderate	Moderate	Low
Hb:							
Hord------------	---	---	---	---	Moderate	High	Low
HbA:							
Hord------------	---	---	---	---	Moderate	High	Low
HbB:							
Hord------------	---	---	---	---	Moderate	High	Low
Hd:							
Hord------------	---	---	---	---	Moderate	High	Low
HdA:							
Hord------------	---	---	---	---	Moderate	High	Low
HoA:							
Holdrege--------	---	---	---	---	Moderate	Low	Low
HoB:							
Holdrege--------	---	---	---	---	Moderate	Low	Low
HoB2:							
Holdrege--------	---	---	---	---	Moderate	Low	Low
HQ:							
Holdrege--------	---	---	---	---	Moderate	Low	Low
Hall------------	---	---	---	---	Moderate	Moderate	Low
In:							
Inavale---------	---	---	---	---	Low	Moderate	Low

SOIL FEATURES--Continued
Buffalo County, Nebraska

Map symbol and soil name	Restrictive layer				Potential for Frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated Steel	Concrete
		In	In				
KCB:							
Kenesaw	---	---	---	---	Moderate	Moderate	Low
Coly	---	---	---	---	Moderate	High	Low
Ks:							
Kenesaw	---	---	---	---	Moderate	Moderate	Low
KsA:							
Kenesaw	---	---	---	---	Moderate	Moderate	Low
KsB:							
Kenesaw	---	---	---	---	Moderate	Moderate	Low
Lex:							
Lex	---	---	---	---	High	High	Low
Lf:							
Leshara	---	---	---	---	High	High	Low
LG:							
Gibbon	---	---	---	---	High	High	Low
Leshara	---	---	---	---	High	High	Low
Lm:							
Loup	---	---	---	---	Moderate	High	Low
Lx:							
Gothenburg	---	---	---	---	Moderate	Moderate	Low
M:							
Fluvaquents	---	---	---	---	Moderate	High	Low
M-W:							
Miscellaneous Water	---	---	---	---	---	---	---
OrC:							
Anselmo	---	---	---	---	Moderate	Moderate	Low
P:							
Platte	---	---	---	---	Moderate	High	Moderate
PL:							
Platte	---	---	---	---	Moderate	High	Moderate
Alda	---	---	---	---	High	Moderate	Low
RB:							
Coly	---	---	---	---	Moderate	High	Low
Ru:							
Rusco	---	---	---	---	High	High	Low
Rw:							
Riverwash	---	---	---	---	Low	Moderate	Moderate
Sc:							
Scott	---	---	---	---	High	High	Low
SdA:							
Simeon	---	---	---	---	Low	Low	Low
Slc:							
Silver Creek	---	---	---	---	High	High	Low
Sx:							
Bolent	---	---	---	---	Moderate	Low	Low
TsA:							
Dunday	---	---	---	---	Low	Low	Low
TXA:							
Dunday	---	---	---	---	Low	Low	Low
Valentine	---	---	---	---	Low	Low	Low
TXB:							
Dunday	---	---	---	---	Low	Low	Low
Valentine	---	---	---	---	Low	Low	Low
TYA:							
Dunday	---	---	---	---	Low	Low	Low
Valentine	---	---	---	---	Low	Low	Low
UHC:							
Holdrege	---	---	---	---	Moderate	Low	Low
Uly	---	---	---	---	Moderate	High	Low
UHC2:							
Uly	---	---	---	---	Moderate	High	Low
Coly	---	---	---	---	Moderate	High	Low
Holdrege	---	---	---	---	Moderate	Low	Low
UsD:							
Uly	---	---	---	---	Moderate	High	Low
VbC:							
Valentine	---	---	---	---	Low	Low	Low
W:							
Water	---	---	---	---	---	---	---
Wb:							
Wann	---	---	---	---	High	Moderate	Low
Wm:							
Wann	---	---	---	---	High	Moderate	Low
Wr:							
Wood River	---	---	---	---	Low	High	High
WrA:							
Wood River	---	---	---	---	Low	High	High
WS:							
Wood River	---	---	---	---	Low	High	High
Gayville Variant	---	---	---	---	Moderate	High	Moderate
Wx:							
Barney	---	---	---	---	Moderate	High	Low

WATER MANAGEMENT
Buffalo County, Nebraska

The soils of the survey area are rated in the Water Management table according to limitations that affect their suitability for water management. Soils are rated for pond reservoir areas, drainage, irrigation, terraces and diversions, and grassed waterways. Restrictive features that affect each soil for the specified use is also provided in the table.

The ratings in the table are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. Not limited indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. Slightly limited indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. Moderately limited indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. Limited indicates that the soil has one or more features that are significant limitations for the specified use. The limitations can be overcome, but generally require special design, soil reclamation, or installation procedures that may result in additional expense. Fair performance and moderate to high maintenance can be expected. Very limited indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Limitation class terms, such as very limited or limited, etc., limitation ratings, and numerical ratings are shown for each soil feature listed. As many as three soil features may be listed for each soil component if applicable. The overall limitation rating for the soil component is based on the most severe limitation.

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorablecompaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects theamount of usable material. It also affects traffic ability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent water table, permeability of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

Drainage is the removal of excess surface and subsurface water from the soil. How easily and effectively the soil is drained depends on the depth to bedrock, to a cemented pan, or to other layers that affect the rate of water movement; permeability; depth to a high water table or depth of standing water if the soil is subject to ponding; slope; susceptibility to flooding; subsidence of organic layers; and the potential for frost action. Excavating and grading and the stability of ditch banks are affected by depth to bedrock or to a cemented pan, large stones, slope, and the hazard of cutbanks caving. The productivity of the soil after drainage is adversely affected by extreme acidity or by toxic substances in the root zone, such as salts, sodium, and sulfur. Availability of drainage outlets is not considered in the ratings.

Irrigation is the controlled application of water to supplement rainfall and support plant growth. The design and management of an irrigation system are affected by depth to the water table, the need for drainage, flooding, available water capacity, intake rate, permeability, erosion hazard, and slope. The construction of a system is affected by large stones and depth to bedrock or to a cemented pan. The performance of a system is affected by the depth of the root zone, the amount of salts or sodium, and soil reaction.

Terraces and diversions are embankments or a combination of channels and ridges constructed across a slope to control erosion and conserve moisture by intercepting runoff. Slope, wetness, large stones, and depth to bedrock or to a cemented pan affect the construction of terraces and diversions. A restricted rooting depth, a very limited hazard of wind erosion or water erosion, an excessively coarse texture, and restricted permeability adversely affect maintenance.

Grassed waterways are natural or constructed channels, generally broad and shallow, which conduct surface water to outlets at a non-erosive velocity. Large stones, wetness, slope, and depth to bedrock or to a cemented pan affect the construction of grassed waterways. A hazard of wind erosion, low available water capacity, restricted rooting depth, toxic substances such as salts and sodium, and restricted permeability adversely affect the growth and maintenance of the grass after construction.

WATER MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this report indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Map symbol and soil name	Features affecting--			
	Drainage	Irrigation	Terraces and diversions	Grassed waterways
2Gg:				
Gibbon	Limitation: excess salt frost action	Limitation: excess salt wetness	Limitation: erodes easily wetness	Limitation: erodes easily excess salt
2Hb:				
Hobbs	Limitation: deep to water	Limitation: flooding	Limitation: erodes easily	Limitation: erodes easily
2Kt:				
Cozad	Limitation: deep to water	Limitation: soil blowing	Limitation: erodes easily soil blowing	Limitation: erodes easily
2Or:				
Anselmo	Limitation: deep to water	Limitation: soil blowing	Limitation: soil blowing	Favorable
2OrB2:				
Anselmo	Limitation: deep to water	Limitation: slope soil blowing	Limitation: soil blowing	Favorable
2Sc:				
Scott	Limitation: frost action percs slowly ponding	Limitation: erodes easily percs slowly ponding	Limitation: erodes easily percs slowly ponding	Limitation: erodes easily percs slowly wetness
2TXA:				
Dunday	Limitation: deep to water	Limitation: fast intake droughty	Limitation: too sandy soil blowing	Limitation: droughty
Valentine	Limitation: deep to water	Limitation: fast intake droughty	Limitation: too sandy soil blowing	Limitation: rooting depth droughty
AED:				
Arents, Earthen Dam	---	---	---	---
Ax:				
Alda	Limitation: frost action cutbanks cave	Limitation: wetness soil blowing	Limitation: too sandy wetness soil blowing	Favorable
Ay:				
Alda	Limitation: frost action cutbanks cave	Limitation: wetness	Limitation: too sandy wetness	Favorable
Bdn:				
Blendon	Limitation: deep to water	Limitation: soil blowing	Limitation: soil blowing	Favorable
BdnA:				
Anselmo	Limitation: deep to water	Limitation: soil blowing	Limitation: soil blowing	Favorable
Bed:				
Blendon	Limitation: deep to water	Favorable	Favorable	Favorable
BedA:				
Anselmo	Limitation: deep to water	Favorable	Favorable	Favorable
Bob:				
Boel	Limitation: flooding cutbanks cave	Limitation: wetness droughty	Limitation: too sandy wetness soil blowing	Limitation: rooting depth droughty
Boc:				
Boel	Limitation: flooding cutbanks cave	Limitation: wetness droughty	Limitation: too sandy wetness	Limitation: rooting depth droughty
By:				
Coly	Limitation: deep to water	Limitation: erodes easily slope	Limitation: erodes easily slope	Limitation: erodes easily slope
Hobbs	Limitation: deep to water	Limitation: flooding	Limitation: erodes easily	Limitation: erodes easily
CbC:				
Coly	Limitation: deep to water	Limitation: erodes easily slope	Limitation: erodes easily slope	Limitation: erodes easily slope
CbE:				
Coly	Limitation: deep to water	Limitation: erodes easily slope	Limitation: erodes easily slope	Limitation: erodes easily slope
Cm:				
Cass	Limitation: deep to water	Favorable	Favorable	Favorable
Coz:				
Cozad	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily

WATER MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this report indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Map symbol and soil name	Features affecting--			
	Drainage	Irrigation	Terraces and diversions	Grassed waterways
CozA:				
Cozad	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
CozB2:				
Cozad	Limitation: deep to water	Limitation: slope	Limitation: erodes easily	Limitation: erodes easily
CozC2:				
Cozad	Limitation: deep to water	Limitation: slope	Limitation: erodes easily slope	Limitation: erodes easily slope
Cs:				
Cass	Limitation: deep to water	Limitation: soil blowing	Limitation: soil blowing	Favorable
CYE:				
Coly	Limitation: deep to water	Limitation: erodes easily slope	Limitation: erodes easily slope	Limitation: erodes easily slope
Gg:				
Gibbon	Limitation: frost action	Limitation: wetness	Limitation: wetness	Favorable
Gk:				
Grigston	Limitation: deep to water	Favorable	Favorable	Favorable
GP:				
Pits	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy	Limitation: rooting depth slope droughty
Ha:				
Hall	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
HaA:				
Hall	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
Hb:				
Hord	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
HbA:				
Hord	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
HbB:				
Hord	Limitation: deep to water	Limitation: slope	Limitation: erodes easily	Limitation: erodes easily
Hd:				
Hord	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
HdA:				
Hord	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
HoA:				
Holdrege	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
HoB:				
Holdrege	Limitation: deep to water	Limitation: slope	Limitation: erodes easily	Limitation: erodes easily
HoB2:				
Holdrege	Limitation: deep to water	Limitation: slope	Limitation: erodes easily	Limitation: erodes easily
HQ:				
Holdrege	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
Hall	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
In:				
Inavale	Limitation: deep to water	Limitation: soil blowing droughty	Limitation: too sandy soil blowing	Limitation: droughty
KCB:				
Kenesaw	Limitation: deep to water	Limitation: slope	Limitation: erodes easily	Limitation: erodes easily
Coly	Limitation: deep to water	Limitation: erodes easily slope	Limitation: erodes easily	Limitation: erodes easily
Ks:				
Kenesaw	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
KsA:				
Kenesaw	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
KsB:				
Kenesaw	Limitation: deep to water	Limitation: slope	Limitation: erodes easily	Limitation: erodes easily

WATER MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this report indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Map symbol and soil name	Features affecting--			
	Drainage	Irrigation	Terraces and diversions	Grassed waterways
Lex:				
Lex	Limitation: frost action cutbanks cave	Limitation: wetness	Limitation: erodes easily too sandy wetness	Limitation: erodes easily wetness
Lf:				
Leshara	Limitation: frost action	Limitation: wetness soil blowing	Limitation: erodes easily wetness soil blowing	Limitation: erodes easily wetness
LG:				
Gibbon	Limitation: frost action	Limitation: wetness	Limitation: wetness	Favorable
Leshara	Limitation: frost action	Limitation: wetness	Limitation: erodes easily wetness	Limitation: erodes easily wetness
Lm:				
Loup	Limitation: ponding cutbanks cave	Limitation: ponding droughty	Limitation: too sandy ponding	Limitation: wetness droughty
Lx:				
Gothenburg	Limitation: flooding cutbanks cave	Limitation: wetness droughty	Limitation: too sandy wetness	Limitation: wetness droughty
M:				
Fluvaquents	Limitation: flooding ponding	Limitation: rooting depth ponding	Limitation: ponding	Limitation: rooting depth wetness
M-W:				
Miscellaneous Water	---	---	---	---
OrC:				
Anselmo	Limitation: deep to water	Limitation: slope	Limitation: slope soil blowing	Limitation: slope
P:				
Platte	Limitation: flooding cutbanks cave	Limitation: wetness droughty	Limitation: too sandy wetness soil blowing	Limitation: rooting depth wetness droughty
PL:				
Platte	Limitation: flooding cutbanks cave	Limitation: wetness droughty	Limitation: too sandy wetness soil blowing	Limitation: rooting depth wetness droughty
Alda	Limitation: frost action cutbanks cave	Limitation: wetness soil blowing	Limitation: too sandy wetness soil blowing	Favorable
RB:				
Coly	Limitation: deep to water	Limitation: erodes easily slope	Limitation: erodes easily slope	Limitation: erodes easily slope
Ru:				
Rusco	Limitation: frost action	Limitation: wetness	Limitation: erodes easily wetness	Limitation: erodes easily
Rw:				
Riverwash	Limitation: flooding ponding cutbanks cave	Limitation: fast intake ponding droughty	Limitation: too sandy ponding	Limitation: rooting depth wetness droughty
Sc:				
Scott	Limitation: frost action percs slowly ponding	Limitation: erodes easily percs slowly ponding	Limitation: erodes easily percs slowly ponding	Limitation: erodes easily percs slowly wetness
SdA:				
Simeon	Limitation: deep to water	Limitation: droughty	Limitation: too sandy soil blowing	Limitation: droughty
Slc:				
Silver Creek	Limitation: frost action percs slowly	Limitation: percs slowly wetness	Limitation: erodes easily wetness	Limitation: erodes easily excess sodium percs slowly
Sx:				
Bolent	Limitation: flooding cutbanks cave	Limitation: fast intake wetness droughty	Limitation: too sandy wetness soil blowing	Limitation: rooting depth droughty
TsA:				
Dunday	Limitation: deep to water	Limitation: droughty	Limitation: too sandy soil blowing	Limitation: droughty

WATER MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this report indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Map symbol and soil name	Features affecting--			
	Drainage	Irrigation	Terraces and diversions	Grassed waterways
TXA:				
Dunday	Limitation: deep to water	Limitation: fast intake droughty	Limitation: too sandy soil blowing	Limitation: droughty
Valentine	Limitation: deep to water	Limitation: fast intake droughty	Limitation: too sandy soil blowing	Limitation: rooting depth droughty
TXB:				
Dunday	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: too sandy soil blowing	Limitation: droughty
Valentine	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: too sandy soil blowing	Limitation: rooting depth droughty
TYA:				
Dunday	Limitation: deep to water	Limitation: fast intake droughty	Limitation: too sandy soil blowing	Limitation: droughty
Valentine	Limitation: deep to water	Limitation: fast intake droughty	Limitation: too sandy soil blowing	Limitation: rooting depth droughty
UHC:				
Holdrege	Limitation: deep to water	Limitation: slope	Limitation: erodes easily slope	Limitation: erodes easily slope
Uly	Limitation: deep to water	Limitation: slope	Limitation: erodes easily slope	Limitation: erodes easily slope
UHC2:				
Uly	Limitation: deep to water	Limitation: slope	Limitation: erodes easily slope	Limitation: erodes easily slope
Coly	Limitation: deep to water	Limitation: erodes easily slope	Limitation: erodes easily slope	Limitation: erodes easily slope
Holdrege	Limitation: deep to water	Limitation: slope	Limitation: erodes easily slope	Limitation: erodes easily slope
UsD:				
Uly	Limitation: deep to water	Limitation: slope	Limitation: erodes easily slope	Limitation: erodes easily slope
VbC:				
Valentine	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy soil blowing	Limitation: rooting depth slope droughty
W:				
Water	---	---	---	---
Wb:				
Wann	Limitation: frost action	Limitation: wetness soil blowing	Limitation: wetness soil blowing	Favorable
Wm:				
Wann	Limitation: frost action	Limitation: wetness	Limitation: wetness	Favorable
Wr:				
Wood River	Limitation: deep to water	Limitation: percs slowly	Limitation: erodes easily	Limitation: erodes easily excess sodium percs slowly
WrA:				
Wood River	Limitation: deep to water	Limitation: percs slowly	Limitation: erodes easily	Limitation: erodes easily excess sodium percs slowly
WS:				
Wood River	Limitation: deep to water	Limitation: excess sodium percs slowly	Limitation: erodes easily percs slowly	Limitation: erodes easily excess sodium percs slowly
Gayville Variant	Limitation: deep to water	Limitation: excess sodium excess salt percs slowly	Limitation: erodes easily	Limitation: erodes easily excess sodium percs slowly
Wx:				
Barney	Limitation: flooding cutbanks cave	Limitation: rooting depth wetness droughty	Limitation: too sandy wetness	Limitation: rooting depth wetness droughty

WATER MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Pond Reservoir Area		Embankments, Dikes, and Levees		Excavated Ponds (Aquifer-fed)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2Gg:							
Gibbon	100	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Depth to saturated zone	1.00	Slow refill	0.30
				Salinity	0.12	Cutbanks cave	0.10
				Piping	0.02	Salty water	0.06
						Deep to water	0.00
2Hb:							
Hobbs	100	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.88	Deep to water	1.00
2Kt:							
Cozad	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Deep to water	1.00
				Seepage	0.09		
2Or:							
Anselmo	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.69	Deep to water	1.00
2OrB2:							
Anselmo	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.69	Deep to water	1.00
2Sc:							
Scott	100	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Ponding	1.00	Deep to water	1.00
				Depth to saturated zone	1.00		
				Hard to pack	0.44		
2TXA:							
Dunday	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Deep to water	1.00
Valentine	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Deep to water	1.00
AED:							
Arents, Earthen Dam-	100	Not rated		Not rated		Not rated	
Ax:							
Alda	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Cutbanks cave	1.00
				Depth to saturated zone	0.86	Deep to water	0.06
				Piping	0.02		
Ay:							
Alda	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Cutbanks cave	1.00
				Depth to saturated zone	1.00	Deep to water	0.00
				Piping	0.02		
Bdn:							
Blendon	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Deep to water	1.00
				Piping	0.02		
BdnA:							
Anselmo	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.57	Deep to water	1.00
Bed:							
Blendon	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Deep to water	1.00
				Piping	0.02		
BedA:							
Anselmo	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.57	Deep to water	1.00
Bob:							
Boel	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Cutbanks cave	1.00

WATER MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Pond Reservoir Area		Embankments, Dikes, and Levees		Excavated Ponds (Aquifer-fed)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
				Depth to saturated zone	1.00	Deep to water	0.00
Boc:							
Boel	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Cutbanks cave	1.00
				Depth to saturated zone	1.00	Deep to water	0.00
By:							
Coly	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Deep to water	1.00
		Slope	0.06				
Hobbs	50	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.66	Deep to water	1.00
CbC:							
Coly	100	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Deep to water	1.00
CbE:							
Coly	100	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Deep to water	1.00
		Slope	0.15				
Cm:							
Cass	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.99	Deep to water	1.00
Coz:							
Cozad	100	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Deep to water	1.00
CozA:							
Cozad	100	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Deep to water	1.00
CozB2:							
Cozad	100	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Deep to water	1.00
CozC2:							
Cozad	100	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Deep to water	1.00
Cs:							
Cass	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.99	Deep to water	1.00
CYE:							
Coly	60	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Deep to water	1.00
		Slope	0.21				
Gg:							
Gibbon	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Cutbanks cave	1.00
				Depth to saturated zone	1.00	Deep to water	0.00
				Seepage	0.96		
Gk:							
Grigston	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.98	Deep to water	1.00
GP:							
Pits	100	Not rated		Not rated		Not rated	
Ha:							
Hall	100	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.57	Deep to water	1.00
HaA:							
Hall	100	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.46	Deep to water	1.00

WATER MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Pond Reservoir Area		Embankments, Dikes, and Levees		Excavated Ponds (Aquifer-fed)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Hb:							
Hord	100	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.84	Very limited Deep to water	1.00
HbA:							
Hord	100	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.84	Very limited Deep to water	1.00
HbB:							
Hord	100	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.84	Very limited Deep to water	1.00
Hd:							
Hord	100	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.58	Very limited Deep to water	1.00
HdA:							
Hord	100	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.58	Very limited Deep to water	1.00
HoA:							
Holdrege	100	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.80	Very limited Deep to water	1.00
HoB:							
Holdrege	100	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.80	Very limited Deep to water	1.00
HoB2:							
Holdrege	100	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.33	Very limited Deep to water	1.00
HQ:							
Holdrege	60	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.80	Very limited Deep to water	1.00
Hall	40	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.57	Very limited Deep to water	1.00
In:							
Inavale	100	Very limited Seepage	1.00	Somewhat limited Seepage	0.69	Very limited Deep to water	1.00
KCB:							
Kenesaw	60	Somewhat limited Seepage	0.70	Very limited Piping	1.00	Very limited Deep to water	1.00
Coly	40	Somewhat limited Seepage	0.70	Very limited Piping	1.00	Very limited Deep to water	1.00
Ks:							
Kenesaw	100	Somewhat limited Seepage	0.70	Very limited Piping	1.00	Very limited Deep to water	1.00
KsA:							
Kenesaw	100	Somewhat limited Seepage	0.70	Very limited Piping	1.00	Very limited Deep to water	1.00
KsB:							
Kenesaw	100	Somewhat limited Seepage	0.70	Very limited Piping	1.00	Very limited Deep to water	1.00
Lex:							
Lex	100	Very limited Seepage	1.00	Very limited Seepage Depth to saturated zone	1.00 1.00	Very limited Cutbanks cave Deep to water	1.00 0.00
Lf:							
Leshara	100	Very limited Seepage	1.00	Very limited Piping Depth to saturated zone Seepage	1.00 1.00 0.98	Very limited Cutbanks cave Deep to water	1.00 0.00
LG:							
Gibbon	50	Very limited Seepage	1.00	Very limited Piping	1.00	Somewhat limited Cutbanks cave	0.10

WATER MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Pond Reservoir Area		Embankments, Dikes, and Levees		Excavated Ponds (Aquifer-fed)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
				Depth to saturated zone	1.00	Deep to water	0.00
Leshara	50	Very limited Seepage	 1.00	Very limited Piping Depth to saturated zone Seepage	 1.00 1.00 0.98	Very limited Cutbanks cave Deep to water	 1.00 0.00
Lm: Loup	100	Very limited Seepage	 1.00	Very limited Depth to saturated zone Seepage	 1.00 0.50	Very limited Cutbanks cave	 1.00
Lx: Gothenburg	100	Very limited Seepage	 1.00	Very limited Seepage Depth to saturated zone	 1.00 1.00	Very limited Cutbanks cave	 1.00
M: Fluvaquents	100	Very limited Seepage	 1.00	Very limited Depth to saturated zone Seepage	 1.00 0.19	Very limited Cutbanks cave	 1.00
M-W: Miscellaneous Water-	100	Not rated		Not rated		Not rated	
OrC: Anselmo	100	Very limited Seepage	 1.00	Somewhat limited Seepage	 0.69	Very limited Deep to water	 1.00
P: Platte	100	Very limited Seepage	 1.00	Very limited Seepage Depth to saturated zone	 1.00 1.00	Very limited Cutbanks cave Deep to water	 1.00 0.00
PL: Platte	60	Very limited Seepage	 1.00	Very limited Seepage Depth to saturated zone	 1.00 1.00	Very limited Cutbanks cave Deep to water	 1.00 0.00
Alda	40	Very limited Seepage	 1.00	Very limited Seepage Depth to saturated zone Piping	 1.00 0.86 0.02	Very limited Cutbanks cave Deep to water	 1.00 0.06
RB: Coly	100	Somewhat limited Slope Seepage	 0.94 0.70	Very limited Piping	 1.00	Very limited Deep to water	 1.00
Ru: Rusco	100	Somewhat limited Seepage	 0.70	Very limited Ponding Depth to saturated zone Piping	 1.00 1.00 0.97	Somewhat limited Slow refill Cutbanks cave	 0.30 0.10
Rw: Riverwash	100	Not rated		Not rated		Not rated	
Sc: Scott	100	Somewhat limited Seepage	 0.70	Very limited Ponding Depth to saturated zone Hard to pack	 1.00 1.00 0.44	Very limited Deep to water	 1.00
SdA: Simeon	100	Very limited		Somewhat limited		Very limited	

WATER MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Pond Reservoir Area		Embankments, Dikes, and Levees		Excavated Ponds (Aquifer-fed)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		Seepage	1.00	Seepage	0.98	Deep to water	1.00
Slc:							
Silver Creek--------	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	1.00	Cutbanks cave	1.00
				Seepage	0.49	Deep to water	0.24
				Depth to saturated zone	0.46	Salty water	0.01
Sx:							
Bolent--------------	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Cutbanks cave	1.00
				Depth to saturated zone	0.46	Deep to water	0.24
TsA:							
Dunday--------------	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Deep to water	1.00
TXA:							
Dunday--------------	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Deep to water	1.00
Valentine-----------	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Deep to water	1.00
TXB:							
Dunday--------------	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Deep to water	1.00
Valentine-----------	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Deep to water	1.00
TYA:							
Dunday--------------	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Deep to water	1.00
Valentine-----------	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Deep to water	1.00
UHC:							
Holdrege------------	50	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.80	Deep to water	1.00
Uly-----------------	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Deep to water	1.00
UHC2:							
Uly-----------------	40	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Deep to water	1.00
Coly----------------	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Deep to water	1.00
Holdrege------------	30	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.68	Deep to water	1.00
UsD:							
Uly-----------------	100	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Deep to water	1.00
		Slope	0.01				
VbC:							
Valentine-----------	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Deep to water	1.00
W:							
Water---------------	100	Not rated		Not rated		Not rated	
Wb:							
Wann----------------	100	Very limited		Somewhat limited		Somewhat limited	
		Seepage	1.00	Depth to saturated zone	0.46	Deep to water	0.24
				Seepage	0.08	Cutbanks cave	0.10
				Piping	0.02		
Wm:							
Wann----------------	100	Very limited		Somewhat limited		Somewhat limited	

WATER MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Pond Reservoir Area		Embankments, Dikes, and Levees		Excavated Ponds (Aquifer-fed)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		Seepage	1.00	Depth to saturated zone	0.46	Deep to water	0.24
				Seepage	0.07	Cutbanks cave	0.10
				Piping	0.02		
Wr:							
Wood River----------	100	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Deep to water	1.00
WrA:							
Wood River----------	100	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Deep to water	1.00
WS:							
Wood River----------	70	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Deep to water	1.00
Gayville Variant----	30	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Piping	1.00	Slow refill	0.30
				Depth to saturated zone	0.46	Deep to water	0.24
						Cutbanks cave	0.10
						Salty water	0.06
Wx:							
Barney--------------	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Cutbanks cave	1.00
				Depth to saturated zone	1.00		

SANITARY FACILITIES
Buffalo County, Nebraska

Sanitary Facilities

The following tables show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. Not limited indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. Slightly limited indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. Somewhat limited indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. Very limited indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

A trench sanitary landfill is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

SANITARY FACILITIES
Buffalo County, Nebraska

In an area sanitary landfill, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a water table, ponding, slope, and depth to bedrock or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

SANITARY FACILITIES--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2Gg:					
Gibbon	100	Very limited		Very limited	
		Restricted permeability	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Seepage	0.50
2Hb:					
Hobbs	100	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.00
2Kt:					
Cozad	100	Somewhat limited		Very limited	
		Restricted permeability	0.50	Seepage	1.00
2Or:					
Anselmo	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Restricted permeability	0.50	Slope	0.00
2OrB2:					
Anselmo	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Restricted permeability	0.50	Slope	0.33
2Sc:					
Scott	100	Very limited		Very limited	
		Restricted permeability	1.00	Ponding	1.00
		Ponding	1.00	Seepage	0.50
		Depth to saturated zone	1.00		
2TXA:					
Dunday	60	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.00
Valentine	40	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.00
AED:					
Arents, Earthen Dam-	100	Not rated		Not rated	
Ax:					
Alda	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
Ay:					
Alda	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
Bdn:					
Blendon	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
BdnA:					
Anselmo	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.00
Bed:					
Blendon	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
BedA:					
Anselmo	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.00
Bob:					
Boel	100	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00

SANITARY FACILITIES--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00
				Slope	0.00
Boc:					
Boel	100	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00
				Slope	0.00
By:					
Coly	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.50	Seepage	0.50
Hobbs	50	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.00
CbC:					
Coly	100	Somewhat limited		Very limited	
		Restricted permeability	0.50	Slope	1.00
		Slope	0.00	Seepage	0.50
CbE:					
Coly	100	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.50	Seepage	0.50
Cm:					
Cass	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
Coz:					
Cozad	100	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
CozA:					
Cozad	100	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.00
CozB2:					
Cozad	100	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.33
CozC2:					
Cozad	100	Somewhat limited		Very limited	
		Restricted permeability	0.50	Slope	1.00
		Slope	0.00	Seepage	0.50
Cs:					
Cass	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.00
CYE:					
Coly	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.50	Seepage	0.50
Gg:					
Gibbon	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Restricted permeability	0.50		
Gk:					
Grigston	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Restricted permeability	0.50		

SANITARY FACILITIES--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
GP:					
Pits	100	Not rated		Not rated	
Ha:					
Hall	100	Very limited		Somewhat limited	
		Restricted permeability	1.00	Seepage	0.50
HaA:					
Hall	100	Very limited		Somewhat limited	
		Restricted permeability	1.00	Seepage	0.50
				Slope	0.00
Hb:					
Hord	100	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
HbA:					
Hord	100	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.00
HbB:					
Hord	100	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.33
Hd:					
Hord	100	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
HdA:					
Hord	100	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.00
HoA:					
Holdrege	100	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.00
HoB:					
Holdrege	100	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.33
HoB2:					
Holdrege	100	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.33
HQ:					
Holdrege	60	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
Hall	40	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
In:					
Inavale	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Depth to saturated zone	0.43	Slope	0.00
KCB:					
Kenesaw	60	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.33
Coly	40	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.33
Ks:					
Kenesaw	100	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
KsA:					
Kenesaw	100	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50

SANITARY FACILITIES--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
				Slope	0.00
KsB:					
Kenesaw	100	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.33
Lex:					
Lex	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
Lf:					
Leshara	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00
		Restricted permeability	0.50		
LG:					
Gibbon	50	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Restricted permeability	0.50	Depth to saturated zone	1.00
Leshara	50	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00
		Restricted permeability	0.50		
Lm:					
Loup	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00
Lx:					
Gothenburg	100	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00
				Slope	0.00
M:					
Fluvaquents	100	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
M-W:					
Miscellaneous Water-	100	Not rated		Not rated	
OrC:					
Anselmo	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Restricted permeability	0.50	Slope	1.00
		Slope	0.00		
P:					
Platte	100	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Filtering capacity	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Slope	0.00
PL:					
Platte	60	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Filtering capacity	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Slope	0.00
Alda	40	Very limited		Very limited	

SANITARY FACILITIES--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
		Filtering capacity	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Slope	0.00
RB:					
Coly----------	100	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.50	Seepage	0.50
Ru:					
Rusco----------	100	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Restricted permeability	0.50	Seepage	0.50
Rw:					
Riverwash----------	100	Not rated		Not rated	
Sc:					
Scott----------	100	Very limited		Very limited	
		Restricted permeability	1.00	Ponding	1.00
		Ponding	1.00	Seepage	0.50
		Depth to saturated zone	1.00		
SdA:					
Simeon----------	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.00
Slc:					
Silver Creek--------	100	Very limited		Very limited	
		Restricted permeability	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Filtering capacity	1.00		
Sx:					
Bolent----------	100	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00
TsA:					
Dunday----------	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.00
TXA:					
Dunday----------	60	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.00
Valentine----------	40	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.00
TXB:					
Dunday----------	60	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.33
Valentine----------	40	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.33
TYA:					
Dunday----------	60	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.00
Valentine----------	40	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00

SANITARY FACILITIES--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
				Slope	0.00
UHC:					
Holdrege	50	Somewhat limited		Very limited	
		Restricted permeability	0.50	Slope	1.00
		Slope	0.00	Seepage	0.50
Uly	50	Somewhat limited		Very limited	
		Restricted permeability	0.50	Slope	1.00
		Slope	0.00	Seepage	0.50
UHC2:					
Uly	40	Somewhat limited		Very limited	
		Restricted permeability	0.50	Slope	1.00
		Slope	0.00	Seepage	0.50
Coly	30	Somewhat limited		Very limited	
		Restricted permeability	0.50	Slope	1.00
		Slope	0.00	Seepage	0.50
Holdrege	30	Somewhat limited		Very limited	
		Restricted permeability	0.50	Slope	1.00
		Slope	0.00	Seepage	0.50
UsD:					
Uly	100	Somewhat limited		Very limited	
		Slope	0.84	Slope	1.00
		Restricted permeability	0.50	Seepage	0.50
VbC:					
Valentine	100	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Slope	0.16	Slope	1.00
W:					
Water	100	Not rated		Not rated	
Wb:					
Wann	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
				Depth to saturated zone	1.00
Wm:					
Wann	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
				Depth to saturated zone	1.00
Wr:					
Wood River	100	Very limited		Somewhat limited	
		Restricted permeability	1.00	Seepage	0.50
WrA:					
Wood River	100	Very limited		Somewhat limited	
		Restricted permeability	1.00	Seepage	0.50
				Slope	0.00
WS:					
Wood River	70	Very limited		Somewhat limited	
		Restricted permeability	1.00	Seepage	0.50
Gayville Variant	30	Very limited		Very limited	
		Restricted permeability	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Seepage	0.50
		Flooding	0.40	Flooding	0.40
Wx:					
Barney	100	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00

SANITARY FACILITIES--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2Gg:							
Gibbon	100	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.86
		Too clayey	0.50				
2Hb:							
Hobbs	100	Very limited		Very limited		Not limited	
		Flooding	1.00	Flooding	1.00		
2Kt:							
Cozad	100	Very limited		Not limited		Not limited	
		Seepage	1.00				
2Or:							
Anselmo	100	Very limited		Very limited		Very limited	
		Too Sandy	1.00	Seepage	1.00	Seepage	1.00
						Too Sandy	0.50
2OrB2:							
Anselmo	100	Very limited		Very limited		Very limited	
		Too Sandy	1.00	Seepage	1.00	Seepage	1.00
						Too Sandy	0.50
2Sc:							
Scott	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
2TXA:							
Dunday	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
Valentine	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
AED:							
Arents, Earthen Dam-	100	Not rated		Not rated		Not rated	
Ax:							
Alda	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too Sandy	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too Sandy	1.00			Depth to saturated zone	0.47
Ay:							
Alda	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too Sandy	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too Sandy	1.00			Depth to saturated zone	0.86
Bdn:							
Blendon	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
BdnA:							
Anselmo	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too Sandy	1.00			Too Sandy	0.50
Bed:							
Blendon	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
BedA:							
Anselmo	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
Bob:							
Boel	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Too Sandy	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Seepage	1.00	Depth to saturated zone	0.86
		Too Sandy	1.00				
Boc:							
Boel	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Too Sandy	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Seepage	1.00	Depth to saturated zone	0.86

SANITARY FACILITIES--Continued
Buffalo County, Nebraska

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Map symbol and soil name	Pct of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		Too Sandy	1.00				
By:							
Coly	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Hobbs	50	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Hard to compact	1.00
CbC:							
Coly	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.00	Slope	0.00	Slope	0.00
CbE:							
Coly	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Cm:							
Cass	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
Coz:							
Cozad	100	Not limited		Not limited		Not limited	
CozA:							
Cozad	100	Not limited		Not limited		Not limited	
CozB2:							
Cozad	100	Not limited		Not limited		Not limited	
CozC2:							
Cozad	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.00	Slope	0.00	Slope	0.00
Cs:							
Cass	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
CYE:							
Coly	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Gg:							
Gibbon	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too Sandy	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too Sandy	1.00			Depth to saturated zone	0.86
Gk:							
Grigston	100	Very limited		Not limited		Very limited	
		Seepage	1.00			Seepage	1.00
GP:							
Pits	100	Not rated		Not rated		Not rated	
Ha:							
Hall	100	Not limited		Not limited		Not limited	
HaA:							
Hall	100	Not limited		Not limited		Not limited	
Hb:							
Hord	100	Not limited		Not limited		Not limited	
HbA:							
Hord	100	Not limited		Not limited		Not limited	
HbB:							
Hord	100	Not limited		Not limited		Not limited	
Hd:							
Hord	100	Not limited		Not limited		Not limited	
HdA:							
Hord	100	Not limited		Not limited		Not limited	
HoA:							
Holdrege	100	Not limited		Not limited		Not limited	
HoB:							
Holdrege	100	Not limited		Not limited		Not limited	
HoB2:							
Holdrege	100	Not limited		Not limited		Not limited	
HQ:							
Holdrege	60	Not limited		Not limited		Not limited	
Hall	40	Not limited		Not limited		Not limited	
In:							
Inavale	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too Sandy	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too Sandy	1.00				
KCB:							
Kenesaw	60	Not limited		Not limited		Not limited	
Coly	40	Not limited		Not limited		Not limited	
Ks:							
Kenesaw	100	Not limited		Not limited		Not limited	

SANITARY FACILITIES--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
KsA:							
Kenesaw	100	Not limited		Not limited		Not limited	
KsB:							
Kenesaw	100	Not limited		Not limited		Not limited	
Lex:							
Lex	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too Sandy	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too Sandy	1.00			Depth to saturated zone	0.86
Lf:							
Leshara	100	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.86
		Seepage	1.00				
LG:							
Gibbon	50	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.86
		Seepage	1.00	Seepage	1.00	Seepage	0.21
Leshara	50	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.86
		Seepage	1.00				
Lm:							
Loup	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too Sandy	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too Sandy	1.00			Depth to saturated zone	1.00
Lx:							
Gothenburg	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Too Sandy	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Too Sandy	1.00				
M:							
Fluvaquents	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Seepage	1.00	Too Sandy	0.50
		Too Sandy	1.00				
M-W:							
Miscellaneous Water-	100	Not rated		Not rated		Not rated	
OrC:							
Anselmo	100	Very limited		Very limited		Very limited	
		Too Sandy	1.00	Seepage	1.00	Seepage	1.00
		Slope	0.00	Slope	0.00	Too Sandy	0.50
						Slope	0.00
P:							
Platte	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Too Sandy	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Seepage	1.00	Depth to saturated zone	0.86
		Too Sandy	1.00				
PL:							
Platte	60	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Too Sandy	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Seepage	1.00	Depth to saturated zone	0.86
		Too Sandy	1.00				
Alda	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too Sandy	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too Sandy	1.00			Depth to saturated zone	0.47
RB:							
Coly	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00

SANITARY FACILITIES--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ru:							
Rusco	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Rw:							
Riverwash	100	Not rated		Not rated		Not rated	
Sc:							
Scott	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
SdA:							
Simeon	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
Slc:							
Silver Creek	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Seepage	1.00	Too clayey	1.00
		Too Sandy	1.00			Too Sandy	0.50
						Depth to saturated zone	0.11
Sx:							
Bolent	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.11
		Seepage	1.00	Seepage	1.00		
TsA:							
Dunday	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
TXA:							
Dunday	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
Valentine	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
TXB:							
Dunday	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
Valentine	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
TYA:							
Dunday	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
Valentine	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
UHC:							
Holdrege	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.00	Slope	0.00	Slope	0.00
Uly	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.00	Slope	0.00	Slope	0.00
UHC2:							
Uly	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.00	Slope	0.00	Slope	0.00
Coly	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.00	Slope	0.00	Slope	0.00
Holdrege	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.00	Slope	0.00	Slope	0.00
UsD:							
Uly	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.84	Slope	0.84	Slope	0.84
VbC:							
Valentine	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00	Slope	0.16	Seepage	1.00

SANITARY FACILITIES--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		Slope	0.16			Slope	0.16
W:							
Water----------	100	Not rated		Not rated		Not rated	
Wb:							
Wann----------	100	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	0.50
		Seepage	1.00	Seepage	1.00	Depth to saturated zone	0.11
Wm:							
Wann----------	100	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	0.50
		Seepage	1.00	Seepage	1.00	Depth to saturated zone	0.11
Wr:							
Wood River----------	100	Very limited		Not limited		Very limited	
		Sodium content	1.00			Sodium content	1.00
		Too clayey	0.50			Hard to compact	1.00
						Too clayey	0.50
WrA:							
Wood River----------	100	Very limited		Not limited		Very limited	
		Too clayey	1.00			Too clayey	1.00
		Sodium content	1.00			Sodium content	1.00
						Hard to compact	1.00
WS:							
Wood River----------	70	Very limited		Not limited		Very limited	
		Sodium content	1.00			Sodium content	1.00
		Too clayey	0.50			Hard to compact	1.00
						Too clayey	0.50
Gayville Variant----	30	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.11
		Flooding	0.40	Flooding	0.40		
Wx:							
Barney----------	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Too Sandy	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Seepage	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Too Sandy	1.00			Gravel content	0.00

AGRICULTURAL WASTE MANAGEMENT
Buffalo County, Nebraska

The nature of the soil is also important in the application of organic wastes and wastewater to land as fertilizers and irrigation; it is also important when the soil is used as a medium for treatment and disposal of these wastes. Favorable soil properties are required to prevent environmental damage.

The use of organic wastes and wastewater as production resources will result in energy conservation, prevent the waste of these important resources, and prevent problems associated with their disposal. Where disposal is the goal, and a maximum amount is disposed in a minimum area to hold costs to a minimum, risk of environmental damage is the principal constraint. Where the reuse goal is pursued, and a minimum amount is applied to a maximum area to obtain the greatest benefit, environmental damage is unlikely.

Interpretations developed for waste management may include ratings for (1) manure and food processing wastes; (2) municipal sewage sludge; (3) irrigation use of wastewater; or (4) treatment of wastewater by the slow rate process, overland flow process, or rapid infiltration process. If available, these should be located in this subsection.

Soil properties are important considerations in areas where soils are used as sites for the treatment and disposal of organic waste and wastewater. Selection of soils with properties that favor waste management can help to prevent environmental damage.

The Ag-Waste tables show the degree and kind of soil limitations affecting the treatment of agricultural waste, including municipal and food-processing wastewater and effluent from lagoons or storage ponds. Municipal wastewater is the waste stream from a municipality. It contains domestic waste and may contain industrial waste. It may have received primary or secondary treatment. It is rarely untreated sewage. Food-processing wastewater results from the preparation of fruits, vegetables, milk, cheese, and meats for public consumption. In places it is high in content of sodium and chloride. In the context of these tables, the effluent in lagoons and storage ponds is from facilities used to treat or store food-processing wastewater or domestic or animal waste. Domestic and food-processing wastewater is very dilute, and the effluent from the facilities that treat or store it commonly is very low in content of carbonaceous and nitrogenous material; the content of nitrogen commonly ranges from 10 to 30 milligrams per liter. The wastewater from animal waste treatment lagoons or storage ponds, however, has much higher concentrations of these materials, mainly because the manure has not been diluted as much as the domestic waste. The content of nitrogen in this wastewater generally ranges from 50 to 2,000 milligrams per liter. When wastewater is applied, checks should be made to ensure that nitrogen, phosphorus, heavy metals, and salts are not added in excessive amounts.

The ratings in the tables are for waste management systems that not only dispose of and treat organic waste or wastewater but also are beneficial to crops (application of manure and food-processing waste, application of sewage sludge, and disposal of wastewater by irrigation)and for waste management systems that are designed only for the purpose of wastewater disposal and treatment (overland flow of wastewater, rapid infiltration of wastewater, and slow rate treatment of wastewater).

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect agricultural waste management. Not limited indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. Slightly limited indicates that the soil has features that are generally favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. Somewhat limited indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. Very limited indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Application of manure and food-processing waste not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. Manure is the excrement of livestock and poultry, and food-processing waste is damaged fruit and vegetables and the peelings, stems, leaves, pits, and soil particles removed in food preparation. The manure and food-processing waste are either solid, slurry, or liquid. Their nitrogen content varies. A high content of nitrogen limits the application rate. Toxic or otherwise dangerous wastes, such as those mixed with the lye used in food processing, are not considered in the ratings.

The ratings are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the waste is applied, and the method by which the waste is applied. The properties that affect absorption include permeability, depth to a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, and available water capacity. The properties that affect plant growth and microbial activity include reaction, the sodium adsorption ratio, salinity, and bulk density.The wind erodibility group, the soil erodibility factor K, and slope are consideredin estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Application of sewage sludge not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. In the context of this table, sewage sludge is the residual product of the treatment of municipal sewage. The solid component consists mainly of cell mass, primarily bacteria cells that developed during secondary treatment and have incorporated soluble organics into their own bodies. The sludge has small amounts of sand, silt, and other solid debris. The content of nitrogen varies. Some sludge has constituents that are toxic to plants or hazardous to the food chain, such as heavy metals and exotic organic compounds, and should be analyzed chemically prior to use.

AGRICULTURAL WASTE MANAGEMENT
Buffalo County, Nebraska

The content of water in the sludge ranges from about 98 percent to less than 40 percent. The sludge is considered liquid if it is more than about 90 percent water, slurry if it is about 50 to 90 percent water, and solid if it is less than about 50 percent water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the sludge is applied, and the method by which the sludge is applied. The properties that affect absorption, plant growth, and microbial activity include permeability, depth to a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, available water capacity, reaction, salinity, and bulk density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of sludge. Permanently frozen soils are unsuitable for waste treatment.

Disposal of wastewater by irrigation not only disposes of municipal wastewater and wastewater from food-processing plants, lagoons, and storage ponds but also can improve crop production by increasing the amount of water available to crops. The ratings in the table are based on the soil properties that affect the design, construction, management, and performance of the irrigation system. The properties that affect design and management include the sodium adsorption ratio, depth to a water table, ponding, available water capacity, permeability, slope, and flooding. The properties that affect construction include stones, cobbles, depth to bedrock or a cemented pan, depth to a water table, and ponding.

The properties that affect performance include depth to bedrock or a cemented pan, bulk density, the sodium adsorption ratio, salinity, reaction, and the cation-exchange capacity, which is used to estimate the capacity of a soil to adsorb heavy metals. Permanently frozen soils are not suitable for disposal of wastewater by irrigation.

See the National Soil Handbook, September 1992, Part 620, for criteria used in rating soils for sanitary facilities and waste management.

AGRICULTURAL WASTE MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2Gg:							
Gibbon	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Salinity	1.00	Salinity	1.00
		Salinity	0.50	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Restricted permeability	0.22
		Sodium content	0.08	Sodium content	0.08	Sodium content	0.08
2Hb:							
Hobbs	100	Somewhat limited		Very limited		Somewhat limited	
		Flooding	0.60	Flooding	1.00	Flooding	0.60
2Kt:							
Cozad	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Filtering capacity	0.00	Filtering capacity	0.00	Filtering capacity	0.00
2Or:							
Anselmo	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
2OrB2:							
Anselmo	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
						Too steep for surface application	0.08
2Sc:							
Scott	100	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Runoff limitation	0.40	Too acid	0.42	Too acid	0.42
		Too acid	0.11				
2TXA:							
Dunday	60	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Droughty	0.14	Droughty	0.14
		Droughty	0.14				
Valentine	40	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Droughty	0.26	Droughty	0.26
		Droughty	0.26				
AED:							
Arents, Earthen Dam-	100	Not rated		Not rated		Not rated	
Ax:							
Alda	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Sodium content	0.08	Sodium content	0.08	Sodium content	0.08
		Droughty	0.00	Droughty	0.00	Droughty	0.00
Ay:							
Alda	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Sodium content	0.08	Sodium content	0.08	Sodium content	0.08
Bdn:							
Blendon	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
BdnA:							
Anselmo	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00

AGRICULTURAL WASTE MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Bed:							
Blendon	100	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00
BedA:							
Anselmo	100	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00
Bob:							
Boel	100	Very limited Filtering capacity Depth to saturated zone Flooding Leaching limitation	1.00 1.00 0.60 0.45	Very limited Flooding Filtering capacity Depth to saturated zone	1.00 1.00 1.00	Very limited Filtering capacity Depth to saturated zone Flooding	1.00 1.00 0.60
Boc:							
Boel	100	Very limited Filtering capacity Depth to saturated zone Flooding Leaching limitation	1.00 1.00 0.60 0.45	Very limited Flooding Filtering capacity Depth to saturated zone	1.00 1.00 1.00	Very limited Filtering capacity Depth to saturated zone Flooding	1.00 1.00 0.60
By:							
Coly	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application Too steep for sprinkler application	1.00 1.00
Hobbs	50	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
CbC:							
Coly	100	Somewhat limited Slope	0.00	Somewhat limited Slope	0.00	Very limited Too steep for surface application Too steep for sprinkler application	1.00 0.10
CbE:							
Coly	100	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application Too steep for sprinkler application	1.00 1.00
Cm:							
Cass	100	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00
Coz:							
Cozad	100	Not limited		Not limited		Not limited	
CozA:							
Cozad	100	Not limited		Not limited		Not limited	
CozB2:							
Cozad	100	Not limited		Not limited		Somewhat limited Too steep for surface application	0.08
CozC2:							
Cozad	100	Somewhat limited Slope	0.00	Somewhat limited Slope	0.00	Very limited Too steep for surface application Too steep for sprinkler application	1.00 0.10
Cs:							
Cass	100	Very limited		Very limited		Very limited	

AGRICULTURAL WASTE MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
CYE:							
Coly	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
Gg:							
Gibbon	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Gk:							
Grigston	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
GP:							
Pits	100	Not rated		Not rated		Not rated	
Ha:							
Hall	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Restricted permeability	0.31
HaA:							
Hall	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Restricted permeability	0.31
Hb:							
Hord	100	Not limited		Not limited		Not limited	
HbA:							
Hord	100	Not limited		Not limited		Not limited	
HbB:							
Hord	100	Not limited		Not limited		Somewhat limited	
						Too steep for surface application	0.08
Hd:							
Hord	100	Not limited		Not limited		Not limited	
HdA:							
Hord	100	Not limited		Not limited		Not limited	
HoA:							
Holdrege	100	Not limited		Not limited		Not limited	
HoB:							
Holdrege	100	Not limited		Not limited		Somewhat limited	
						Too steep for surface application	0.08
HoB2:							
Holdrege	100	Not limited		Not limited		Somewhat limited	
						Too steep for surface application	0.08
HQ:							
Holdrege	60	Not limited		Not limited		Not limited	
Hall	40	Not limited		Not limited		Not limited	
In:							
Inavale	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Droughty	0.02	Droughty	0.02
		Droughty	0.02				
KCB:							
Kenesaw	60	Not limited		Not limited		Somewhat limited	
						Too steep for surface application	0.08
Coly	40	Not limited		Not limited		Somewhat limited	
						Too steep for surface application	0.08

AGRICULTURAL WASTE MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ks:							
Kenesaw	100	Not limited		Not limited		Not limited	
KsA:							
Kenesaw	100	Not limited		Not limited		Not limited	
KsB:							
Kenesaw	100	Not limited		Not limited		Somewhat limited	
						Too steep for surface application	0.08
Lex:							
Lex	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Restricted permeability	0.41	Restricted permeability	0.31	Restricted permeability	0.31
Lf:							
Leshara	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
LG:							
Gibbon	50	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Leshara	50	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Lm:							
Loup	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Runoff limitation	0.40				
Lx:							
Gothenburg	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Droughty	0.60	Droughty	0.60	Droughty	0.60
		Runoff limitation	0.40				
M:							
Fluvaquents	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Filtering capacity	1.00	Flooding	1.00	Filtering capacity	1.00
		Droughty	0.65	Filtering capacity	1.00	Droughty	0.65
		Flooding	0.60	Droughty	0.65	Flooding	0.60
		Runoff limitation	0.40				
M-W:							
Miscellaneous Water-	100	Not rated		Not rated		Not rated	
OrC:							
Anselmo	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	0.00	Slope	0.00	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
P:							
Platte	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00

AGRICULTURAL WASTE MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		Depth to dense layer	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Droughty	0.66
		Droughty	0.66	Droughty	0.66	Flooding	0.60
		Flooding	0.60				
PL:							
Platte	60	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Depth to dense layer	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Droughty	0.66
		Droughty	0.66	Droughty	0.66	Flooding	0.60
		Flooding	0.60				
Alda	40	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Droughty	0.10	Droughty	0.10	Droughty	0.10
		Sodium content	0.08	Sodium content	0.08	Sodium content	0.08
RB:							
Coly	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
Ru:							
Rusco	100	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Restricted permeability	0.22
Rw:							
Riverwash	100	Not rated		Not rated		Not rated	
Sc:							
Scott	100	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Runoff limitation	0.40	Too acid	0.42	Too acid	0.42
		Too acid	0.11				
SdA:							
Simeon	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Droughty	0.08	Droughty	0.08
		Droughty	0.08				
Slc:							
Silver Creek	100	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	0.46	Depth to saturated zone	0.46	Depth to saturated zone	0.46
		Runoff limitation	0.40				
		Salinity	0.01				
Sx:							
Bolent	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Flooding	1.00	Filtering capacity	1.00
		Flooding	0.60	Filtering capacity	1.00	Flooding	0.60

AGRICULTURAL WASTE MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		Depth to saturated zone	0.46	Depth to saturated zone	0.46	Depth to saturated zone	0.46
		Leaching limitation	0.45	Droughty	0.29	Droughty	0.29
		Droughty	0.29				
TsA:							
Dunday	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45				
TXA:							
Dunday	60	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Droughty	0.03	Droughty	0.03
		Droughty	0.03				
Valentine	40	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.82	Droughty	0.82	Droughty	0.82
		Leaching limitation	0.45				
TXB:							
Dunday	60	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Droughty	0.03	Too steep for surface application	0.08
		Droughty	0.03			Droughty	0.03
Valentine	40	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.82	Droughty	0.82	Droughty	0.82
		Leaching limitation	0.45			Too steep for surface application	0.08
TYA:							
Dunday	60	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Droughty	0.03	Droughty	0.03
		Droughty	0.03				
Valentine	40	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.82	Droughty	0.82	Droughty	0.82
		Leaching limitation	0.45				
UHC:							
Holdrege	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.00	Slope	0.00	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
Uly	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.00	Slope	0.00	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
UHC2:							
Uly	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.00	Slope	0.00	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
Coly	30	Somewhat limited		Somewhat limited		Very limited	

AGRICULTURAL WASTE MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		Slope	0.00	Slope	0.00	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
Holdrege----------	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.00	Slope	0.00	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
UsD:							
Uly----------	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Too steep for surface application	1.00
						Too steep for sprinkler application	0.89
VbC:							
Valentine----------	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Too steep for surface application	1.00
		Droughty	0.82	Droughty	0.82	Filtering capacity	1.00
		Leaching limitation	0.45	Slope	0.16	Droughty	0.82
		Slope	0.16			Too steep for sprinkler application	0.39
W:							
Water----------	100	Not rated		Not rated		Not rated	
Wb:							
Wann----------	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.46	Depth to saturated zone	0.46	Depth to saturated zone	0.46
		Sodium content	0.08	Sodium content	0.08	Sodium content	0.08
		Filtering capacity	0.00	Filtering capacity	0.00	Filtering capacity	0.00
Wm:							
Wann----------	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.46	Depth to saturated zone	0.46	Depth to saturated zone	0.46
		Sodium content	0.08	Sodium content	0.08	Sodium content	0.08
		Filtering capacity	0.00	Filtering capacity	0.00	Filtering capacity	0.00
Wr:							
Wood River----------	100	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Runoff limitation	0.40				
WrA:							
Wood River----------	100	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Runoff limitation	0.40				
WS:							
Wood River----------	70	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Runoff limitation	0.40				
		Salinity	0.06				
Gayville Variant----	30	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Sodium content	0.98	Sodium content	0.98	Sodium content	0.98
		Depth to saturated zone	0.46	Depth to saturated zone	0.46	Depth to saturated zone	0.46
		Salinity	0.06	Flooding	0.40		

AGRICULTURAL WASTE MANAGEMENT--Continued
Buffalo County, Nebraska

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Wx:							
Barney	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Droughty	1.00	Droughty	1.00	Droughty	1.00
		Runoff limitation	0.40	Restricted permeability	0.22	Restricted permeability	0.22

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
Buffalo County, Nebraska

In this section, hydric soils are defined and described and the hydric soils in the survey area are listed. The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for each of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 1995). These criteria are used to identify a phase of a soil series that normally is associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (USDA, 1999) and "Keys to Soil Taxonomy"' (USDA, 1998) and in the "Soil Survey Manual" (USDA, 1993).

If soils are wet enough for a long enough period to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils in this survey area are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and others, 1996).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units in the Hydric Soil Interpretations table meet the definition of hydric soils and, in addition, have at east one of the hydric soil indicators. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 1996).

Map units that are made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

These map units, in general, do not meet the definition of hydric soils because they do not have one of the hydric soil indicators. A portion of these map units, however, may include hydric soils. Onsite investigation is recommended to determine whether hydric soils occur and the location of the included hydric soils.

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
Buffalo County, Nebraska

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
2Gg:							
GIBBON SILT LOAM, SALINE	GIBBON	No	flat, flood plain	---	---	---	---
2Hb:							
HOBBS SILT LOAM, OCCASIONALLY FLOODED	HOBBS	No	flood plain	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B2	YES	NO	NO
2Kt:							
KENESAW FINE SANDY LOAM, CALCAREOUS VARIANT, 0 TO 1 PERCENT SLOPES	COZAD	No	flat, terrace	---	---	---	---
2Or:							
ORTELLO FINE SANDY LOAM, LOAMY SUBSTRATUM, 0 TO 3 PERCENT SLOPES	ANSELMO	No	hummock, swale	---	---	---	---
2OrB2:							
ORTELLO FINE SANDY LOAM, LOAMY SUBSTRATUM, 3 TO 5 PERCENT SLOPES, ERODED	ANSELMO	No	hummock	---	---	---	---
2Sc:							
SCOTT SILT LOAM, DRAINED	SCOTT	Yes	depression, playa	2B3,3	YES	NO	YES
2TXA:							
THURMAN-VALENTINE LOAMY FINE SANDS, LOAMY SUBSTRATUM, 0 TO 3 PERCENT SLOPES	DUNDAY	No	swale	---	---	---	---
	VALENTINE	No	hummock, ridge	---	---	---	---
AED:							
ARENTS, EARTHEN DAM	ARENTS, EARTHEN DAM	Unranked	---	---	---	---	---
Ax:							
ALDA FINE SANDY LOAM	ALDA	No	flat, flood plain	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
Ay:							
ALDA LOAM	ALDA	No	flat, flood plain	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
Bdn:							
BLENDON FINE SANDY LOAM, 0 TO 1 PERCENT SLOPES	BLENDON	No	flat, terrace	---	---	---	---
BdnA:							
BLENDON FINE SANDY LOAM, 1 TO 3 PERCENT SLOPES	ANSELMO	No	terrace	---	---	---	---
Bed:							
BLENDON LOAM, 0 TO 1 PERCENT SLOPES	BLENDON	No	flat, terrace	---	---	---	---
BedA:							
BLENDON LOAM, 1 TO 3 PERCENT SLOPES	ANSELMO	No	terrace	---	---	---	---
Bob:							
BOEL FINE SANDY LOAM	BOEL	No	flat, flood plain	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B2	YES	NO	NO
Boc:							
BOEL LOAM	BOEL	No	flat, flood plain	---	---	---	---
By:							
BREAKS-ALLUVIAL LAND COMPLEX	COLY	No	scarp, terrace	---	---	---	---
	HOBBS	No	flood plain	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
CbC:							
COLY SILT LOAM, 5 TO 11 PERCENT SLOPES	COLY	No	hillslope	---	---	---	---
CbE:							
COLY SILT LOAM, 11 TO 31 PERCENT SLOPES	COLY	No	break, hillslope	---	---	---	---
Cm:							
CASS LOAM	CASS	No	flat, flood plain	---	---	---	---

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
Buffalo County, Nebraska

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
Coz:							
COZAD SILT LOAM, 0 TO 1 PERCENT SLOPES	COZAD	No	flat, terrace	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
CozA:							
COZAD SILT LOAM, 1 TO 3 PERCENT SLOPES	COZAD	No	terrace	---	---	---	---
CozB2:							
COZAD SILT LOAM, 3 TO 5 PERCENT SLOPES, ERODED	COZAD	No	terrace	---	---	---	---
CozC2:							
COZAD SILT LOAM, 5 TO 11 PERCENT SLOPES, ERODED	COZAD	No	scarp, terrace	---	---	---	---
Cs:							
CASS FINE SANDY LOAM	CASS	No	flat, flood plain	---	---	---	---
CYE:							
COLY, ULY, AND HOBBS SOILS, 15 TO 31 PERCENT SLOPES	COLY	No	break, hillslope	---	---	---	---
	HOBBS	No	flood plain, swale	---	---	---	---
	ULY	No	---	---	---	---	---
Gg:							
GIBBON SILT LOAM	GIBBON	No	flat, flood plain	---	---	---	---
Gk:							
GRIGSTON SILT LOAM	GRIGSTON	No	flat, flood plain	---	---	---	---
GP:							
GRAVEL PIT	PITS	Unranked	---	---	---	---	---
Ha:							
HALL SILT LOAM, TERRACE, 0 TO 1 PERCENT SLOPES	HALL	No	flat, interfluve	---	---	---	---
HaA:							
HALL SILT LOAM, TERRACE, 1 TO 3 PERCENT SLOPES	HALL	No	interfluve	---	---	---	---
Hb:							
HOBBS SILT LOAM, 0 TO 1 PERCENT SLOPES	HORD	No	flat, terrace	---	---	---	---
HbA:							
HOBBS SILT LOAM, 1 TO 3 PERCENT SLOPES	HORD	No	terrace	---	---	---	---
HbB:							
HOBBS SILT LOAM, 3 TO 5 PERCENT SLOPES	HORD	No	terrace	---	---	---	---
Hd:							
HORD SILT LOAM, TERRACE, 0 TO 1 PERCENT SLOPES	HORD	No	flat, terrace	---	---	---	---
HdA:							
HORD SILT LOAM, TERRACE, 1 TO 3 PERCENT SLOPES	HORD	No	terrace	---	---	---	---
HoA:							
HOLDREGE SILT LOAM, 1 TO 3 PERCENT SLOPES	HOLDREGE	No	flat, interfluve	---	---	---	---
HoB:							
HOLDREGE SILT LOAM, 3 TO 5 PERCENT SLOPES	HOLDREGE	No	interfluve	---	---	---	---
HoB2:							
HOLDREGE SILT LOAM, 3 TO 5 PERCENT SLOPES, ERODED	HOLDREGE	No	interfluve	---	---	---	---
HQ:							
HOLDREGE-HALL SILT LOAMS, 0 TO 1 PERCENT SLOPES	HOLDREGE	No	flat, interfluve	---	---	---	---
	HALL	No	flat, interfluve	---	---	---	---
In:							
INAVALE FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES	INAVALE	No	flat, flood plain	---	---	---	---
KCB:							
KENESAW-COLY SILT LOAMS, 3 TO 5 PERCENT SLOPES	KENESAW	No	flat, hummock	---	---	---	---
	COLY	No	hillslope	---	---	---	---

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
Buffalo County, Nebraska

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
Ks: KENESAW SILT LOAM, 0 TO 1 PERCENT SLOPES	KENESAW	No	hummock	---	---	---	---
KsA: KENESAW SILT LOAM, 1 TO 3 PERCENT SLOPES	KENESAW	No	hummock	---	---	---	---
KsB: KENESAW SILT LOAM, 3 TO 5 PERCENT SLOPES	KENESAW	No	hummock	---	---	---	---
Lex: LEX SILT LOAM	LEX	No	flat, flood plain	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
Lf: LESHARA FINE SANDY LOAM	LESHARA	No	flat, flood plain	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
LG: LESHARA AND GIBBON SILT LOAMS	GIBBON	No	flat, flood plain	---	---	---	---
	LESHARA	No	flat, flood plain	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
Lm: LOUP LOAM	LOUP	Yes	flat, flood plain	2B3,3	YES	NO	YES
Lx: LOAMY ALLUVIAL LAND	GOTHENBURG	Yes	flat, flood plain	2B3	YES	NO	NO
	MARSH	Yes	swale	2B1,3	YES	NO	YES
M: MARSH	FLUVAQUENTS	Yes	depression, flood plain	2B3,3	YES	NO	YES
M-W: MISCELLANEOUS WATER (SEWAGE LAGOONS)	MISCELLANEOUS WATER	---	---	---	---	---	---
OrC: ORTELLO FINE SANDY LOAM, 5 TO 11 PERCENT SLOPES	ANSELMO	No	hillslope	---	---	---	---
P: PLATTE SOILS	PLATTE	No	flat, flood plain	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B2	YES	NO	NO
PL: PLATTE-ALDA COMPLEX	PLATTE	No	flat, flood plain	---	---	---	---
	ALDA	No	flat, flood plain	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B2	YES	NO	NO
RB: ROUGH BROKEN LAND, LOESS	COLY	No	break, hillslope	---	---	---	---
Ru: RUSCO SILT LOAM	RUSCO	No	depression	---	---	---	---
	PERCHED WT	Yes	depression	2A	YES	NO	NO
	PONDED SOILS	Yes	depression	2A,3	YES	NO	YES
Rw: RIVERWASH	RIVERWASH	Unranked	flat, flood plain	---	---	---	---
Sc: SCOTT SILT LOAM	SCOTT	Yes	depression, playa	2B3,3	YES	NO	YES
SdA: SIMEON SANDY LOAM, 0 TO 3 PERCENT SLOPES	SIMEON	No	flat, terrace	---	---	---	---
Slc: SILVER CREEK SILT LOAM	SILVER CREEK	No	flat, flood plain	---	---	---	---
Sx: SANDY ALLUVIAL LAND	BOLENT	No	flat, flood plain	---	---	---	---
	LOUP	Yes	flood plain	3,2B3	YES	NO	YES
	WET ALLUVIAL LAND	Yes	swale	3,2B2	YES	NO	YES
TsA: THURMAN FINE SANDY LOAM, TERRACE, 0 TO 3 PERCENT SLOPES	DUNDAY	No	sand sheet, terrace	---	---	---	---

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
Buffalo County, Nebraska

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
TXA: THURMAN-VALENTINE LOAMY FINE SANDS, 0 TO 3 PERCENT SLOPES	DUNDAY	No	swale	---	---	---	---
	VALENTINE	No	hummock, ridge	---	---	---	---
TXB: THURMAN-VALENTINE LOAMY FINE SANDS, 3 TO 5 PERCENT SLOPES	DUNDAY	No	swale	---	---	---	---
	VALENTINE	No	hummock, ridge	---	---	---	---
TYA: THURMAN-VALENTINE LOAMY FINE SANDS, TERRACE, 0 TO 3 PERCENT SLOPES	DUNDAY	No	swale, terrace	---	---	---	---
	VALENTINE	No	hummock, ridge, terrace	---	---	---	---
UHC: ULY AND HOLDREGE SILT LOAMS, 5 TO 11 PERCENT SLOPES	HOLDREGE	No	hillslope	---	---	---	---
	ULY	No	hillslope	---	---	---	---
UHC2: ULY, HOLDREGE, AND COLY SOILS, 5 TO 11 PERCENT SLOPES, ERODED	ULY	No	hillslope	---	---	---	---
	COLY	No	hillslope	---	---	---	---
	HOLDREGE	No	hillslope	---	---	---	---
UsD: ULY SILT LOAM, 11 TO 15 PERCENT SLOPES	ULY	No	hillslope	---	---	---	---
VbC: VALENTINE LOAMY FINE SAND, 3 TO 17 PERCENT SLOPES	VALENTINE	No	dune	---	---	---	---
W: WATER	WATER	Unranked	---	---	---	---	---
Wb: WANN FINE SANDY LOAM	WANN	No	flat, flood plain	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
Wm: WANN LOAM	WANN	No	flat, flood plain	---	---	---	---
	WT AT 0-1 FOOT	Yes	swale	2B3	YES	NO	NO
Wr: WOOD RIVER SILT LOAM, 0 TO 1 PERCENT SLOPES	WOOD RIVER	No	flat, terrace	---	---	---	---
WrA: WOOD RIVER SILT LOAM, 1 TO 3 PERCENT SLOPES	WOOD RIVER	No	terrace	---	---	---	---
WS: WOOD RIVER-SLICKSPOTS COMPLEX, 0 TO 1 PERCENT SLOPES	WOOD RIVER	No	flat, terrace	---	---	---	---
	GAYVILLE VARIANT	No	flat, terrace	---	---	---	---
Wx: WET ALLUVIAL LAND	BARNEY	Yes	flat, flood plain	2B3	YES	NO	NO

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
Buffalo County, Nebraska

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria

FOOTNOTE: There may be small areas of included soils or miscellaneous areas that are significant to use and management of the soil; yet are too small to delineate on the soil map at the map's original scale. These may be designated as spot symbols and are defined in the published Soil Survey Report or the USDA-NRCS Technical Guide, Part II.
Areas mapped as water or any map unit that contains one of the following conventional symbols is considered a hydric soil map unit: marshes or swamps; wet spots; depressions; streams, lakes and ponds.

1. All Histosols except Folists, or

2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Aquisalids, Pachic subgroups, or Cumulic subgroups that are:

   a. Somewhat poorly drained with a water table equal to 0.0 foot (ft) from the surface during the growing season, or

   b. poorly drained or very poorly drained and have either:
      (1) water table equal to 0.0 ft during the growing season if textures are coarse sand, sand, or fine sand in all layers within 20 inches (in),

      or for other soils

      (2) water table at less than or equal to 0.5 ft from the surface during the growing season if permeability is equal to or greater than 6.0 in/hour (h) in all layers within 20 in, or

      (3) water table at less than or equal to 1.0 ft from the surface during the growing season if permeability is less than 6.0 in/h in any layer within 20 in, or

3. Soils that are frequently ponded for long duration or very long duration during the growing season, or

4. Soils that are frequently flooded for long duration or very long duration during the growing season.

HIGHLY ERODIBLE LANDS REPORT

Survey Area- BUFFALO COUNTY, NEBRASKA

Map Symbol	Soil Mapunit Name	HEL Classifications C=30 R=125 wnd	wat	mu
2Gg	GIBBON SILT LOAM, SALINE	3	3	3
2Hb	HOBBS SILT LOAM, OCCASIONALLY FLOODED	3	3	3
2Kt	KENESAW FINE SANDY LOAM, CALCAREOUS VARIANT, 0 TO 1 PERCENT SLOPES	3	3	3
2Or	ORTELLO FINE SANDY LOAM, LOAMY SUBSTRATUM, 0 TO 3 PERCENT SLOPES	3	3	3
2Sc	SCOTT SILT LOAM, DRAINED	3	3	3
2OrB2	ORTELLO FINE SANDY LOAM, LOAMY SUBSTRATUM, 3 TO 5 PERCENT SLOPES, ERODED	3	3	3
2TXA	THURMAN-VALENTINE LOAMY FINE SANDS, LOAMY SUBSTRATUM, 0 TO 3 PERCENT SLOPES	1	3	1
Ax	ALDA FINE SANDY LOAM	3	3	3
Ay	ALDA LOAM	3	3	3
Bdn	BLENDON FINE SANDY LOAM, 0 TO 1 PERCENT SLOPES	3	3	3
BdnA	BLENDON FINE SANDY LOAM, 1 TO 3 PERCENT SLOPES	3	3	3
Bed	BLENDON LOAM, 0 TO 1 PERCENT SLOPES	3	3	3
BedA	BLENDON LOAM, 1 TO 3 PERCENT SLOPES	3	3	3
Bob	BOEL FINE SANDY LOAM	3	3	3
Boc	BOEL LOAM	3	3	3
By	BREAKS-ALLUVIAL LAND COMPLEX	3	2	2
CYE	COLY, ULY, AND HOBBS SOILS, 15 TO 31 PERCENT SLOPES	3	2	2
CbC	COLY SILT LOAM, 5 TO 11 PERCENT SLOPES	3	2	2
CbE	COLY SILT LOAM, 11 TO 31 PERCENT SLOPES	3	1	1
Cm	CASS LOAM	3	3	3
Coz	COZAD SILT LOAM, 0 TO 1 PERCENT SLOPES	3	3	3
CozA	COZAD SILT LOAM, 1 TO 3 PERCENT SLOPES	3	3	3
CozB2	COZAD SILT LOAM, 3 TO 5 PERCENT SLOPES, ERODED	3	2	2
CozC2	COZAD SILT LOAM, 5 TO 11 PERCENT SLOPES, ERODED	3	2	2
Cs	CASS FINE SANDY LOAM	3	3	3
GP	PITS AND DUMPS	2	2	2
Gg	GIBBON SILT LOAM	3	3	3
Gk	GRIGSTON SILT LOAM	3	3	3
HQ	HOLDREGE-HALL SILT LOAMS, 0 TO 1 PERCENT SLOPES	3	3	3
Ha	HALL SILT LOAM, TERRACE, 0 TO 1 PERCENT SLOPES	3	3	3
HaA	HALL SILT LOAM, TERRACE, 1 TO 3 PERCENT SLOPES	3	3	3
Hb	HOBBS SILT LOAM, 0 TO 1 PERCENT SLOPES	3	3	3
HbA	HOBBS SILT LOAM, 1 TO 3 PERCENT SLOPES	3	3	3
HbB	HOBBS SILT LOAM, 3 TO 5 PERCENT SLOPES	3	3	3
Hd	HORD SILT LOAM, TERRACE, 0 TO 1 PERCENT SLOPES	3	3	3
HdA	HORD SILT LOAM, TERRACE, 1 TO 3 PERCENT SLOPES	3	3	3
HoA	HOLDREGE SILT LOAM, 1 TO 3 PERCENT SLOPES	3	3	3
HoB	HOLDREGE SILT LOAM, 3 TO 5 PERCENT SLOPES	3	2	2
HoB2	HOLDREGE SILT LOAM, 3 TO 5 PERCENT SLOPES, ERODED	3	3	3
In	INAVALE FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES	3	3	3
KCB	KENESAW-COLY SILT LOAMS, 3 TO 5 PERCENT SLOPES	3	2	2
Ks	KENESAW SILT LOAM, 0 TO 1 PERCENT SLOPES	3	3	3
KsA	KENESAW SILT LOAM, 1 TO 3 PERCENT SLOPES	3	3	3
KsB	KENESAW SILT LOAM, 3 TO 5 PERCENT SLOPES	3	3	3
LG	LESHARA AND GIBBON SILT LOAMS	3	3	3
Lex	LEX SILT LOAM	3	3	3
Lf	LESHARA FINE SANDY LOAM	3	3	3
Lm	LOUP LOAM	3	3	3
Lx	LOAMY ALLUVIAL LAND	1	3	1
M	MARSH	3	3	3
OrC	ORTELLO FINE SANDY LOAM, 5 TO 11 PERCENT SLOPES	3	2	2
P	PLATTE SOILS	1	3	1
PL	PLATTE-ALDA COMPLEX	2	3	2
RB	ROUGH BROKEN LAND, LOESS	3	1	1
Ru	RUSCO SILT LOAM	3	3	3

Rw	RIVERWASH	1	3	1
Sc	SCOTT SILT LOAM	3	3	3
SdA	SIMEON SANDY LOAM, 0 TO 3 PERCENT SLOPES	3	3	3
Slc	SILVER CREEK SILT LOAM	3	3	3
Sx	SANDY ALLUVIAL LAND	1	3	1
TXA	THURMAN-VALENTINE LOAMY FINE SANDS, 0 TO 3 PERCENT SLOPES	1	3	1
TXB	THURMAN-VALENTINE LOAMY FINE SANDS, 3 TO 5 PERCENT SLOPES	1	3	1
TYA	THURMAN-VALENTINE LOAMY FINE SANDS, TERRACE, 0 TO 3 PERCENT SLOPES	1	3	1
TsA	THURMAN FINE SANDY LOAM, TERRACE, 0 TO 3 PERCENT SLOPES	3	3	3
UHC	ULY AND HOLDREGE SILT LOAMS, 5 TO 11 PERCENT SLOPES	3	2	2
UHC2	ULY, HOLDREGE, AND COLY SOILS, 5 TO 11 PERCENT SLOPES, ERODED	3	2	2
UsD	ULY SILT LOAM, 11 TO 15 PERCENT SLOPES	3	1	1
VbC	VALENTINE LOAMY FINE SAND, 3 TO 17 PERCENT SLOPES	1	2	1
WS	WOOD RIVER-SLICKSPOTS COMPLEX, 0 TO 1 PERCENT SLOPES	3	3	3
Wb	WANN FINE SANDY LOAM	3	3	3
Wm	WANN LOAM	3	3	3
Wr	WOOD RIVER SILT LOAM, 0 TO 1 PERCENT SLOPES	3	3	3
WrA	WOOD RIVER SILT LOAM, 1 TO 3 PERCENT SLOPES	3	3	3
Wx	WET ALLUVIAL LAND	1	3	1